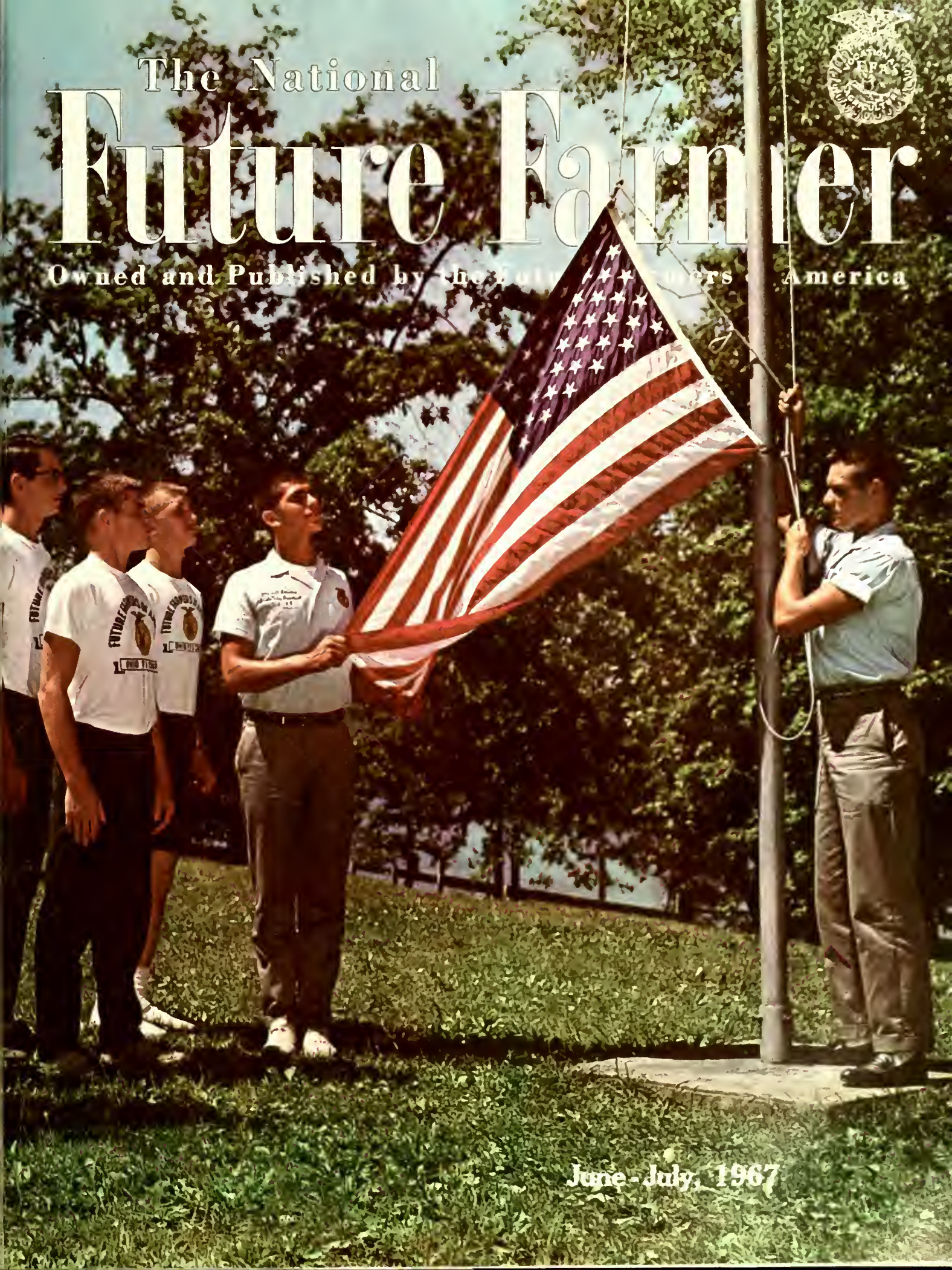


The National Future Farmer

Owned and Published by the [illegible] of America

June - July, 1967

Now! The lowest-priced V-8 pickup you can buy.

Meet the new high-styled 908B —the lowest priced V-8 pickup truck* in the field. Only the INTERNATIONAL® 908B gives you big V-8 value in a standard size pickup at this money-saving price.

All the famous INTERNATIONAL features are standard: rugged, truck-styled chassis, heavy gauge body, stronger suspension, plus full safety package including new, easier steering. You get INTERNATIONAL's extra comfort, too, in the 908B, with the smart 1967 styling that sets the pace in the pickup field.

Why pay more for a full-powered V-8 when you can get it in the world's finest pickup for less? Test drive the new 908B at your nearest INTERNATIONAL Dealer. He can save you more all the way, and he's ready to deliver. International Harvester Company, Chicago, Illinois 60611.

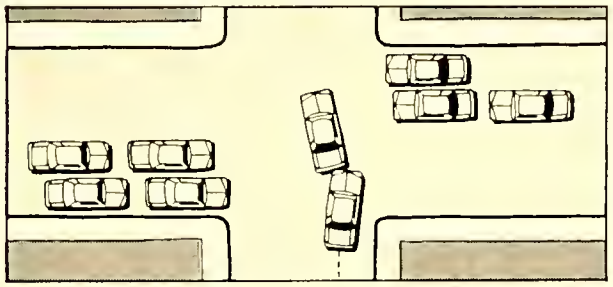
INTERNATIONAL® TRUCKS

*Based on manufacturer's list prices for comparably equipped V-8 models, including heater and defroster. Add state and local taxes, destinetion and handling charges.

Who's at fault?

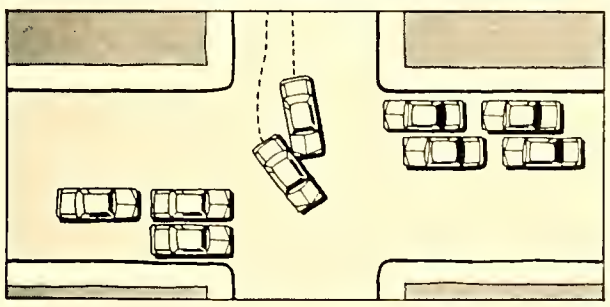
Do you know the law? Test yourself with these three accident situations. If you can spot the guilty drivers, you're well on your way to being a responsible driver.

1 Two cars enter an intersection. The front car, without signaling, slows and begins a left turn. The other car, caught by surprise, strikes the rear of the turning car. Who's at fault?



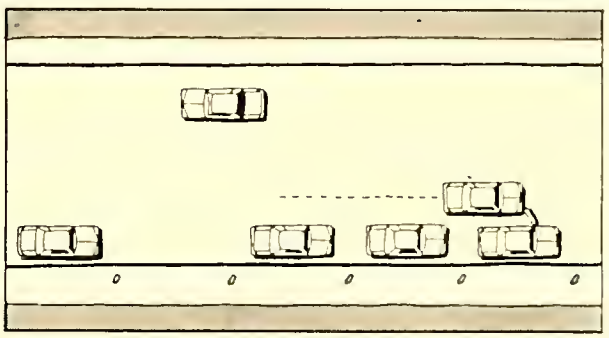
The law invariably holds the rear driver responsible in a rear-end collision . . . even when, as in this case, the front driver is negligent. Because once the mistake is made, only the rear driver has the power to prevent it from resulting in a collision.

2 As two cars approach an intersection on a two-lane street, the rear car starts to pass on the left. Then, without signaling, the front car makes a left turn and is hit broadside by the passing car. Who's at fault?



Again, both cars broke the law. But passing at an intersection is considered the more serious violation. So the passing car is at fault. It's the same reasoning that applies to rear-end collisions. The rear car must allow for mistakes in front of it.

3 A car is travelling parallel to a long row of parked cars at an excessive rate of speed. A door on one of the parked cars suddenly swings open, and the first car hits it. Who's at fault?



Because he interfered with the flow of traffic, the man in the parked car is legally at fault. But the other driver was considerably more negligent. First, he failed to anticipate problems so often created by parked cars. Second, he was travelling too fast.

Knowledge of the law is a basic ingredient of safe driving. But it won't do you any good without another basic ingredient: a safe car. That's why your nearby Firestone Dealer has offered to give your car or your family's car a *free* safety check. And remember . . . Firestone tires are the first choice for original equipment on most new cars and for replacement on used cars.

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The National Future Farmer
Owned and Published by the Future Farmers of America

JUNE-JULY, 1967

THE MAGAZINE FOR YOUNG MEN IN AGRICULTURE

VOLUME 15 NUMBER 5

In This Issue

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23 Night Driving

DRIVING AT NIGHT IS LIKE DRIVING IN ANOTHER WORLD, ACCORDING TO THE NATIONAL SAFETY COUNCIL. AND IN RURAL AREAS YOU ARE THREE TIMES AS LIKELY TO HAVE AN AUTOMOBILE ACCIDENT AT NIGHT AS YOU ARE WHEN DRIVING DURING THE DAY. A DRIVER-EDUCATION INSTRUCTOR TELLS HOW TO SPOT THESE NIGHT HAZARDS.

24 Mechanical Hands Invade Orchards

THERE IS A TREND TO MECHANICAL FRUIT HARVESTING. NOT FAR FROM SEVASTOPOL HIGH SCHOOL, WHICH IS LOCATED NEAR STURGEON BAY, WISCONSIN, THE FFA CAMERA CAPTURED IN FOUR COLOR TWO FUTURE FARMERS OPERATING A $10,000 CHERRY PICKER. THIS ARTICLE KEEPS YOU UP WITH NEW FRUIT HARVESTING METHODS.

42 Mr. Dairy-Businessman

JAMES SALESMAN, ARGYLE, WISCONSIN, IS A BUSINESSMAN. HE IS ALSO FFA'S STAR DAIRY FARMER OF AMERICA. YOU'LL LEARN FROM HIM HOW HE HAS MET THE PROBLEMS OF URBANIZATION AND LONG HARD HOURS BY APPLYING BUSINESS KNOW-HOW. TODAY JAMES OWNS 1B HEAD OF HOLSTEINS PLUS VARIOUS CROP PROGRAMS.

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Our Cover

Summer makes us think of fun, camp, and the patriotic spirit of the Fourth of July. Liberty has its roots in the hearts of people, just as these Future Farmers have roots in the soil.

The scene was the Ohio FFA Camp. The flag is a symbol of both camp fun and liberty. May it always fly.

PHOTO BY BOB E. TAYLOR

THE NATIONAL FUTURE FARMER is mailed every two months on the following dates:

January 20	**FEBRUARY-MARCH** Issue
March 20	**APRIL-MAY** Issue
May 20	**JUNE-JULY** Issue
July 20	**AUGUST-SEPTEMBER** Issue
September 20	**OCTOBER-NOVEMBER** Issue
November 20	**DECEMBER-JANUARY** Issue

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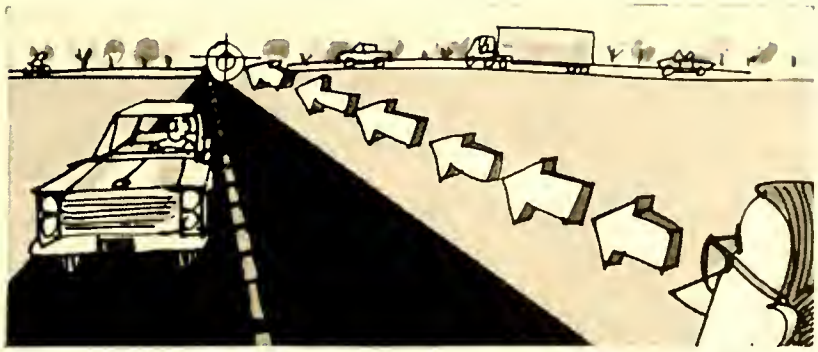
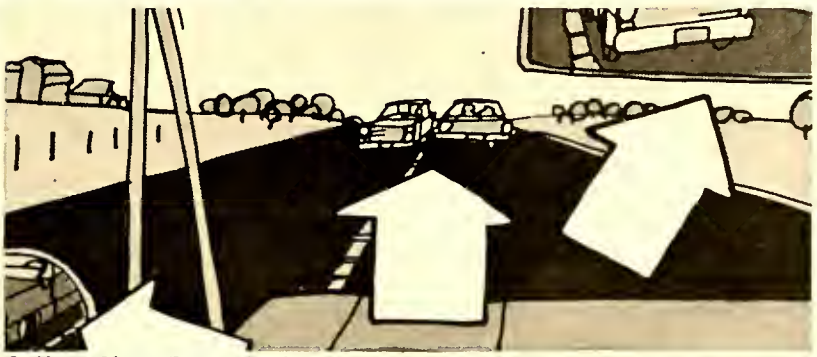
Good driving tips for teens

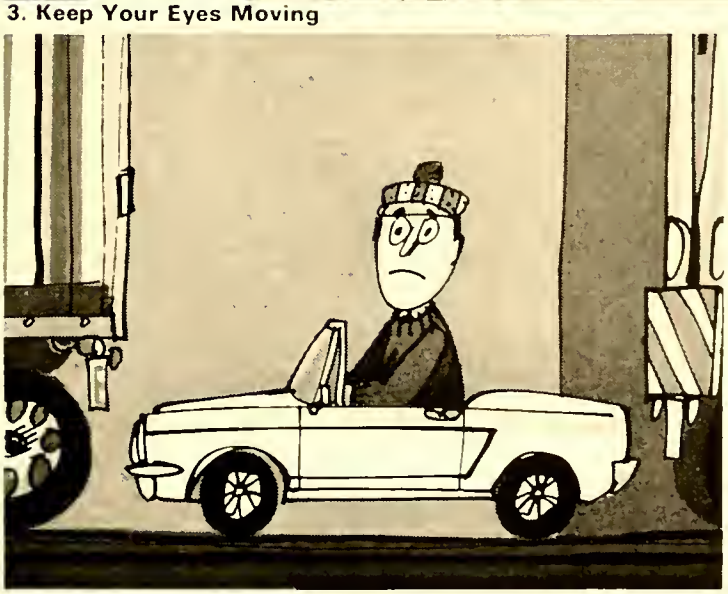


1. Aim High in Steering

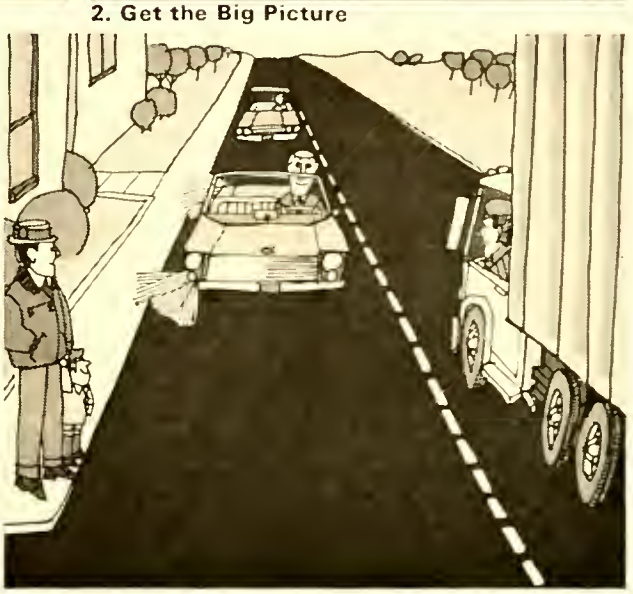
2. Get the Big Picture



3. Keep Your Eyes Moving



4. Leave Yourself An Out



5. Make Sure They See You

The five key seeing habits of safe driving

In the expert opinion of Harold Smith, originator of the "Smith System of No-Accident Driving", the key to becoming an expert driver lies in forming good-seeing habits. You will be well on your way as a safe driver by following the five easy-to-remember rules pictured above. We hope you will learn these five seeing habits now and enjoy trouble-free driving for years to come.

Ford

FOR A SAFER AMERICAN ROAD

Looking Ahead

Livestock

A LOT OF BULL—American Breeders Service, Incorporated has paid $130,000 for a yearling bull, Oak Ridges Reflection "Emperor," establishing a new world's record price for a dairy animal. His sire was A.B.C. Reflection Sovereign, universally recognized as the greatest Holstein bull ever used in Canada. One ampule of semen from A.B.C., who died 12 years ago, was recently offered for sale at a price exceeding $10,000. The "Emperor's" dam is Glenafton Nettie Bonheur Maud, the world's highest priced dairy cow. She sold for $42,000 at a sale in 1962.

HOG CHOLERA OUTBREAK—An outbreak of hog cholera was reported in Michigan only two weeks after the state had been declared "hog cholera free." The outbreak was reported on a single farm in Monroe County following positive laboratory findings. Michigan received its "hog cholera-free" status on April 13. Despite the outbreak, the state can keep its cholera-free status if the outbreak is confined to the one farm.

BROILER AND EGG PRICES TO CONTINUE LOW—The Poultry Survey Committee, made up of leading college economists, predict that U.S. farm broiler prices will likely average 14.5 to 15 cents, about a cent below the same months in 1966. Egg prices are expected by the committee to average 33 cents a dozen which is about 4½ cents below the preceding 12 months.

MILK ORDER PRICING—Market-wide versus individual handler pooling is one of the most explosive issues facing dairymen. Such a decision faces several major markets. In a showdown for the Delaware Valley market, dairymen approved a switch to market-wide pooling. In market-wide pooling, a minimum blend price applies to all producers in the market. But in an individual handler pool, producers selling to different handlers can receive different blend prices. This is because a handler is not paid out of the market pool just because his class I utilization is below the market average. A University of Wisconsin study shows these facts: 1. Most surplus is concentrated in a few large market-wide pool markets. 2. Individual handler pool markets maintain a higher class I and blend price, but they do this by gearing milk volume and producer numbers to needs. Upshot: Producers are less sure of keeping their market. 3. There is a trend to market-wide pooling.

DRESSING PERCENTAGE POOR MEASURE—A University of Missouri study shows that feeding steers beyond average grade to high-good slaughter grade reduces percentage of retail cuts. The study shows that dressing percentage increased 2.4 percent from 139 days on feed to 251 days as cattle become fatter. However, retail yield decreased 7 percent. Result: Dressing percentage is not a good measure of actual yield of saleable meat.

Crops

NATIONAL AGRICULTURAL WEATHER SERVICE—A revised plan for a National Agricultural Weather Service has been announced by the Environmental Science Service Administration. The plan would extend to the entire nation agriculture weather service now provided to 12 U.S. areas. It will establish agriculture weather forecast offices at selected Weather Bureau locations. Five days weekly, these offices will provide farm weather summaries to supplement general forecasts. Three times weekly, it will provide an agricultural interpretation of the five-day outlook. Twice monthly, a similar interpretation will be given for the 30-day outlook. Additionally, specialized advisories will be prepared in support of certain critical farm operations.

GOVERN PLANT POPULATION BY MOISTURE—A report given at a South Dakota fertilizer and soil management meeting suggests this broad rule of thumb: Use about 500 plants per acre per inch of annual precipitation. If you aren't making at least five bushels of corn per 1,000 plants, you may want to cut back the stand to keep in balance with the rest of the program or to the climate of the area.

UNITING DIFFERENT PLANTS POSSIBLE—Uniting plants of two different families may not be too far from reality. University of Wisconsin plant scientists have successfully grafted stem tips of chrysanthemum into the placental tissue of sweet pepper fruits. Their results suggest that at least vegetative union of cells is possible not only between plants of two different species, but also between plants from different families.

NEW SOYBEAN VARIETIES—Three new soybean varieties, developed for the export market, have been released recently to registered growers for the 1967 season. Named Disoy, Magna, and Prize, they will not be available to farmers for commercial production until the 1969 season. Ohio research agronomists say the three new soybean varieties are larger seeded than those currently produced and are tailored for the Japanese market.

Machinery

NEW POLLEN TRAP—A USDA researcher has developed a new pollen trap that is inexpensive, and easy to build and install. It's made of wood, and a beekeeper can make one himself. With the trap, you can collect enough pollen in about ten days to feed ten colonies during the spring buildup. Extra pollen fed to a bee colony enhances its capacity to increase its population. More bees per colony means more honey and more money for the beekeeper.

NEW TOMATO HARVESTER—A new tomato harvester developed by the FMC Corporation is probably the most efficient built to date. As the unit moves through the field, self-sharpening pick-up discs cut tomato vines slightly below ground level. Vines are instantaneously gathered by a winding belt. Even loose tomatoes on the ground are picked up. A shaker mechanism thins the vines and causes the fruit to be separated. The fruit is routed through an air stream to sorting belts where culls are removed. Spent vines are discharged behind the machine.

A challenge for your present feeding program . . .

We say you'll get faster gains — and better bloom — with a Milk-Bank® Feed Program

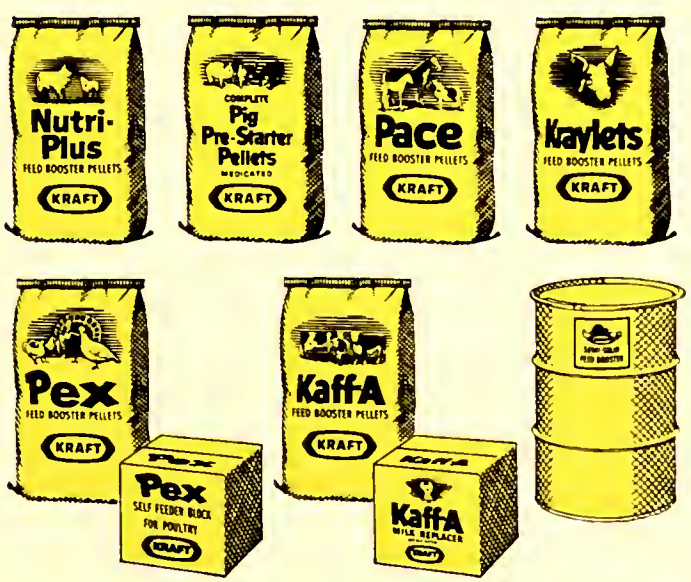
Prove to yourself that the bank of milk nutrients pays.

Here's the bank of milk nutrients in Kraft Feed Boosters: dried whey, delactosed whey, hydrolyzed whey, cultured whey, cheese, dried buttermilk.

Kraft will help you prove on your own animals that a Milk-Bank feed program can give you better results than your present rations. We'll send you free feed formula books and performance charts so you can match Milk-Bank nutrition against any other program.

Once you do, we're sure you'll be a Milk-Bank "booster" for life.

Milk-Bank feed formulas are built around the Kraft Feed Boosters—Pex for poultry, Kaff-A for dairy and beef cattle, Kraylets for swine, Nutri-Plus for sheep, and Pace for horses. These contain nutrients not usually found in ordinary feeds, milk nutrients.



They provide lactose, a hard-working carbohydrate, outperforming all other sugars . . . lactalbumin protein, among the richest in essential amino acids, plus minerals, vitamins and unidentified growth factors.

These give you a better-balanced ration, one that keeps animals healthy, on-feed, and growing. Gains are economical, too, because assimilation improves.

Your stock puts on solid, meaty gains and grade out higher. Bloom improves, and they show better. Milk and egg production go up, too, on Milk-Bank rations.

But prove it all for yourself. Ask your dealer for rations that include Kraft Feed Boosters, and send in the coupon below for the free Milk-Bank formula books and performance charts.

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six
five
four
three
two
one
FIRE!

What they're counting on is you.

You're the Program Test Station Operator. An Army expert. The man in on every beat of the countdown.

Your earphones whisper crisply. Each word sends your eyes to a dial or your fingers to a switch. You check your checklist, then check the checks. Your computers calculate. You confirm. Every second counts.

But time is indifferent. It ticks along. And so does the countdown until those last, long seconds run into that one-word order: FIRE!

You push the button.

You've come a long way from high school. Back then, the only place you saw missile launchings had been on TV.

But now you have Army training behind you. An 8-hour-a-day, 5-day-a-week program that taught you a skill to build a career on. A solid career that will mean sound security all your life.

As a high school graduate, the training you selected was guaranteed in writing before you signed up. You had over 300 courses to choose from. The one you picked was a winner.

So were all the others.

Army

Special Envoys of the FFA

Three members were selected for important international assignments.

FFA HAS selected three special envoys to go to England, Scotland, and Wales to spread the story of the FFA and share ideas with the Young Farmers' Clubs in those countries.

John Parks of Jefferson, Georgia, will go to Wales. Eddie McMillan of Bushnell, Illinois, will travel to Scotland. Kent Frerichs of Wilmot, South Dakota, will go to England. They will all leave New York City on June 9 aboard the Aurelia and sail to Southampton. They will return August 30.

Then in exchange, the Young Farmers' Clubs of Great Britain and of Scotland will send members to the United States to visit. The National Federation of Young Farmers' Clubs will send Robert Collier of Colyton, Devon, England, and Edward Perkins of Carmarthenshire, Wales, to visit in South Dakota and Georgia. The Scottish Association of Young Farmers' Clubs will send Robert Stobo of Lanark, Scotland, to Illinois.

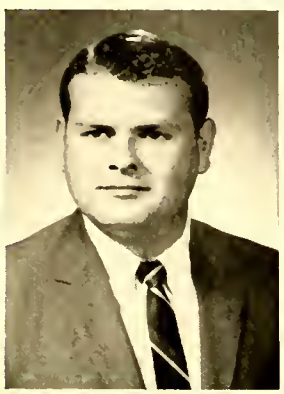
The three of them will leave Southampton on July 27 aboard the Queen Elizabeth and arrive in New York on August 1. They will tour the United States in addition to the time spent in the specific states.

The Future Farmers will meet their counterparts when they first arrive overseas. Then the Young Farmers will come to the United States. Eventually they will all meet again at the National FFA Convention in Kansas City next October.

The Future Farmers were selected by the FFA Governing Committee. Naturally all of them are well qualified for their assignments as special envoys of the FFA. John Parks of Georgia served as state president and is now a student at the University of Georgia. His farming program includes broilers and beef cattle.

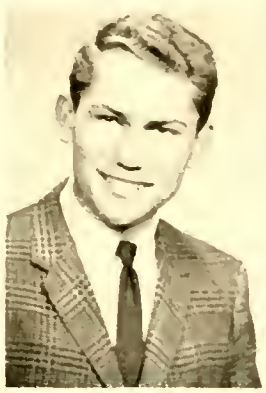
Eddie McMillan has served as state vice president and is currently attending the University of Illinois. He has a 30-cow Polled Hereford herd with his brother. Kent Frerichs was state vice president and is attending South Dakota State University. He is in partnership with his father and has responsibility for their registered Duroc hogs.

Robert Collier of England manages the home farm with emphasis on dairy and pigs. In Wales, Edward Perkins is an auctioneer and is interested in agriculture and forestry. Scottish Young Farmer Robert Stobo has the main responsibility on his home farm for the dairy herd.



John Parks

Eddie McMillan



Kent Frerichs

How you can become an expert in today's action Army.

Your first step should be towards your Army Recruiting Sergeant. He has all the facts on more than 300 courses open to you. You'll get the course you select guaranteed in writing before you enlist. And there's no obligation until you enlist.

Call him today. He's in the phone book listed under U. S. Government.

Meantime, get a colorful, exciting 40-page booklet about Army life and Army opportunities. Simply fill out and mail this coupon. There's no obligation.

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Please rush me your 40-page booklet, "The Secret of Getting Ahead."

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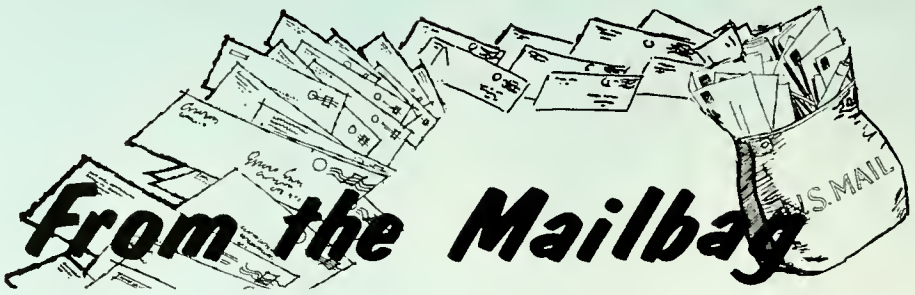

Rice Lake, Wisconsin

I would like to register a complaint as to the condition in which we receive our copies of *The National FUTURE FARMER*. This week our members received the April-May issue, and in questioning them about it I again found that the magazines arrived in deplorable condition for the most part (covers missing or torn, cover with no magazine).

The "dog-eared" look of the magazine as received in the mail certainly degrades an otherwise fine magazine which FFA members can be most proud. I hope something can be done to improve this situation.

Don Triebensee
FFA Advisor

Pierre, South Dakota

Recently I met with a group of our vocational agriculture instructors, and there were numerous complaints regarding the way they were receiving or not receiving their National FFA Magazine.

They reported that in many cases the cover was torn off the magazine, that some were badly mangled, and that quite a number of the boys had not received the magazine at all. I told the instructors that I would write to you about it but also advised them to write to you individually giving a little more detail than they gave me.

I was sure you would want this information and that you would take whatever steps are necessary to correct the difficulties.

H. E. Urton
State Supervisor
Agricultural Education

For some reason, we have had a number of complaints on the last three or four issues regarding damage in the mails. We have discussed this with our printer and did change to a heavier wrapping paper in an effort to correct it. Apparently, these magazines are really taking a beating in the mails.—Ed.

Norcatur, Kansas

I am a member of the Norcatur, Kansas, FFA Chapter. At present, I am serving as president of our chapter.

I would like to brag on the pride and joy of our organization, the National FFA Band. I was honored to be able to play in that marvelous band last October. It was the most thrilling adventure of my life. It is amazing how in three short days high school boys from all over the U. S. can get such a great sound.

Stephen Miller

Topeka, Kansas

I would like to take this opportunity to express appreciation on behalf of FFA and farm families in Kansas for the very fine job the magazine staff is doing in the advertising department.

During most of my teaching career, I taught in the Mennonite areas of Kansas, or probably better described as the heart of the Bible Belt. These families certainly welcomed a publication not cluttered with tobacco, alcohol, or "overnight gimmicks" type of advertising. Several families have maintained their subscriptions long after their last FFA'er reached 21 just because of the policy you have set for good wholesome advertising.

Earl Wineinger
Assistant Supervisor
Agricultural Education

Smith Center, Kansas

As a former FFA advisor, I certainly enjoy your magazine and its many timely and informative articles.

The article in the April-May issue entitled "Will Feeder Pigs Pay?" was good. If at all possible, I would like to have two additional copies of that issue. It is through vocational agriculture and FFA work that we are able to have "above average farmers" who can do the first-class job of management that is necessary.

Bob Rethorst
Farm Service Director
The Smith County State Bank

Kinston, North Carolina

I enjoy *The National FUTURE FARMER* very much. You always include many interesting and helpful materials.

I enjoyed your article in the April-May issue entitled "High Riding Cowboy" very much. Since I like both horses and cowboys, I hope to see many more articles of this type in the farm magazine which I think every farm family should read.

Allen Rouse

Lexington, Illinois

I enjoyed the article "Change and Availability of Farms." It was extremely interesting. I am an FFA member at Lexington High, and I am interested in a farming career.

Will you please send me your list showing land, labor, capital requirements, and returns for 13 representative, operating commercial farms in different parts of the country.

Thank you for this information from "Breaking the Entry Barrier."

Roger L. Reum

Henry, Illinois

In the February-March issue, the editorial asked chapter reporters to send in unusual or outstanding activities. I feel that our activities during National FFA Week were particularly outstanding.

We held an exhibition day on February 24 at the school in the agriculture shop. Over 1,000 persons came to see the exhibits and register for the prizes offered.

The purposes of the event were to promote vocational agriculture among the seventh and eighth grade students and, also, to show the community what the Future Farmers of Henry have accomplished the previous year.

Displays and exhibits were on the livestock, crop, and improvement enterprises. Prizes included a ham to the adult who guessed closest to the weight of a pen of hogs, a record album to the teenager who guessed closest to the weight of two feeder steers, and a group of baby chicks to the grade schooler who guessed the correct number of beans in a quart jar.

Frank McNutt
Chapter Reporter

Waldron, Michigan

Our chapter is selling SMV (slow moving vehicle) signs at cost to area farmers as a public service. Already, we have sold more than $750 worth.

Our FFA chapter has been working for the past year and will continue to work for a safer and better looking area. We are glad to say we have received much participation.

Marvin Lautermilch
Chapter Reporter

Gilbert, Arizona

May I take this opportunity to thank you for sending me the sample calendar kit for our Official FFA Calendar program. It is an excellent example of what we can do to promote FFA through public relations.

I have already been showing the kit to various chapters in this area, and they have shown enthusiastic response to the idea. Of course, many of the chapters are already using the calendar program.

Richard Morrison
National FFA Vice President
Pacific Region

Broad Run, Virginia

I have planned to go to college for four years and want to be a farmer. I want to raise beef cattle, and I would like to find out about some of the requirements I need. I have been taking agriculture for two years. I know this is a requirement. Please send me some information on these requirements.

William S. Teague

In regard to educational requirements for your chosen occupation, I would suggest that you attend a land grant college and major in animal science. You should meet with your advisor and make certain that you take the other courses in addition to vocational agriculture which will be necessary.—Ed.

Heard about the new deodorant for buses?

It's packaged in an experimental muffler, designed and built by GMC Truck & Coach, a division of General Motors Corporation.

The magic ingredients? 137,000 ceramic pellets that have a catalyst coating on the surface. You can see them in the cutaway muffler shown above, between high school senior Gary Lawrence (left) and a GM experimental engineer.

These little gray "peas" cause a chemical change in the exhaust that reduces hydrocarbons and cuts offensive odors down to almost nothing.

As the bus accelerates, the exhaust heats up and the pellets begin hopping around like a panful of popcorn. This agitation flakes off any soot that builds up from the exhaust, prolonging the life of the catalyst.

Years of experimentation have gone into (and will continue to go into) the search for an effective way to reduce exhaust odors. But we think it's worth it. At General Motors we care about making your travel more enjoyable.

Seventeen-year-old Gary Lawrence will graduate from Pontiac Northern High School in Michigan, this June, with an ingenious plan. He intends to work his way through engineering college with his favorite hobby–drafting.

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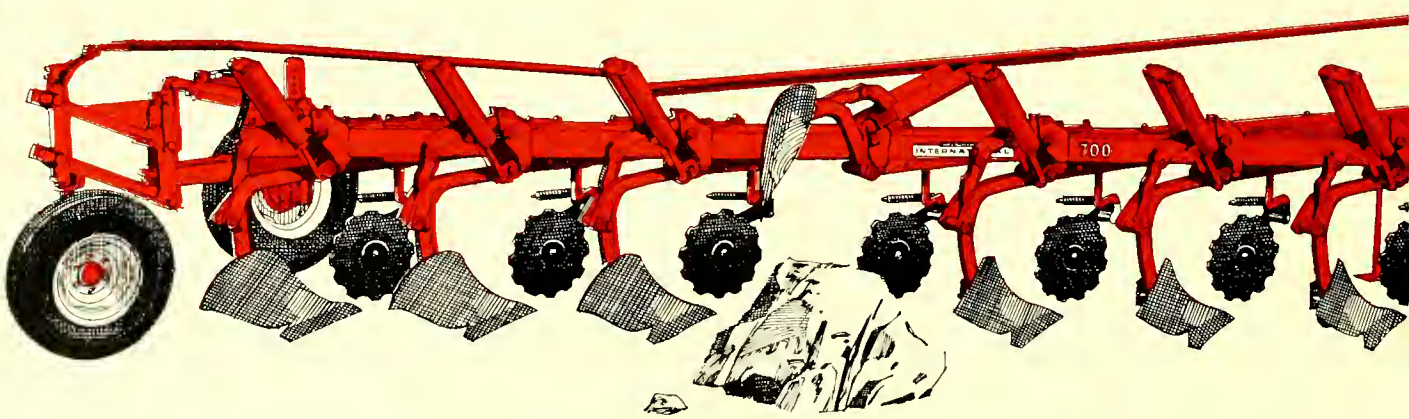

700 SEMI-MOUNTED STEERABLE PLOW

new

700 plow that keeps unplowed spots to a minimum

In those rock or stump-infested fields you'll plow non-stop. With no damage to shares or beams. Automatic beams with two-way protection on the new International 700 see to that.

Hit a sloping rock. Parallel-link beam lets the bottom ride up and over. Reduces tripping action by 90% . . . keeps unplowed spots to a minimum.

Hit a vertical or hooking obstruction. Beam trips. Bottom swings straight back and up. Up to *13 inches* above furrow bottom. Automatically resets to plowing position and returns to pre-set depth. Two or three beams—or even *all* beams—can rise or trip at the same time.

The 700 is semi-mounted with on-land, in-furrow and standard drawbar hitches. Has huge trash clearance—30-inch vertical, 28-inch fore-and-aft. Sizes from 4 to 8 bottoms.

You've never seen anything like this new 700 plow. So see it soon. At your International Harvester dealer.

TWO-WAY PROTECTION

Bottom rises vertically over sloping rocks—enters the ground in plowing position, and returns to pre-set depth.

Bottom trips back and up over vertical rocks—automatically resets and returns to plowing position before entering ground.

First to serve the farmer

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FOR all Official

FFA

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At the first sign of trouble reach for

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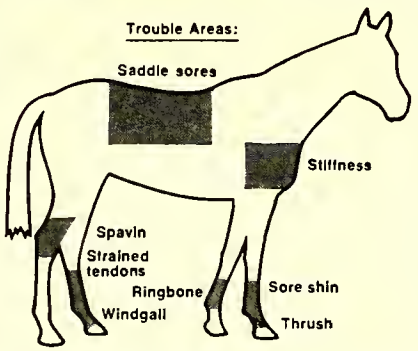


For over 70 years, Absorbine has proved effective in relief of bog spavin, windgall, ringbone, sores and bruises.

Absorbine can be applied right on strained tendons and other trouble areas to reduce lameness and swelling. It instantly starts drawing out soreness. Never causes loss of hair or blistering, either.

There's no better way to keep horses in top condition. Buy Absorbine at druggists or wherever veterinary products are sold.

W. F. Young, Inc., Springfield, Mass.

A Word With The Editor

Demand Up For Agricultural College Graduates

Thinking about going to college? If you do and study agriculture, your employment opportunities have never been greater. If you haven't decided, perhaps these facts will help you decide to go if you can possibly swing it.

Information received from Iowa State University reveals that sharply higher salaries and a strong demand in all areas dominate the employment situation for 1967 agricultural graduates at Midwest colleges and universities. The annual survey of 14 land grant institutions found a 7.1 percent increase in estimated starting salaries as compared to a year earlier. A continued strong demand for graduates in sales and management positions in business and industry contributed the most of the salary increase, but demand is strong in all areas.

The 14 colleges reported that in 1966 private industry took 23 percent of the graduates, and graduate study accounted for another 27 percent. Other areas employing graduates were teaching and extension work, 10 percent; farming and farm management, 9 percent; and government work, 7 percent. Military service took 17 percent of the graduates.

They also reported that students graduating this spring with military obligations completed are faced with nearly an unlimited number of opportunities in some cases. Placement officers at the 14 schools estimated starting salaries for this spring's graduates will be $575 a month for a B.S. degree, $686 for a M.S. degree, and $931 for a Ph.D. degree. Sales and management positions in business, industry and food science, and vocational agricultural teaching positions in high schools continue to present the most opportunities.

More Teachers Of Vocational Agriculture Needed

Here are some facts regarding the need for teachers of vocational agriculture. These were compiled by Dr. Ralph Woodin, professor of agricultural education at Ohio State University and chairman of the Professional Personnel Recruitment Committee.

There were 10,325 positions in teaching vocational agriculture in the United States in 1966, and 1,077 replacements were needed.

The number of vocational agriculture teachers in the United States is estimated at 11,257 by 1970.

One hundred and sixty-two departments of vocational agriculture in the United States could not be open last year because of a shortage of qualified persons to teach in them.

About 61 percent of those qualified for teaching vocational agriculture in the United States enter the profession.

Graduates of agricultural education who do not enter teaching most commonly enter graduate work, armed forces, the teaching of other subjects, farm sales and service occupations, and farming.

All but nine states in the U.S. had shortages of teachers of vocational agriculture in 1966.

The shortage of teachers of vocational agriculture in the United States would be met if each teacher had one of his students every four years prepare for a teaching career, according to the Recruitment Committee of the American Vocational Association.

It's true that these facts apply to the situation as of today, but it is unlikely that the situation will be changed by the time you graduate from college.

Wilson Carnes
Editor

Meet Jeff Maynard, economics major, student leader, ski expert, Army ROTC.

Jeff Maynard is making the most of his college career. While studying for his degree in economics at Dartmouth, he is also preparing to fulfill his military obligation as an officer. Jeff Maynard is taking the course that's training him to be a leader—Army ROTC.

But he still has time for his favorite sport. When the snow comes, he skis. He's a member of the National Ski Patrol and conducts ski classes for Dartmouth students.

But you don't have to ski to make the most of your college career. When you enter college get the most out of it, like Jeff Maynard. Take Army ROTC.

See your guidance counselor for all the details.

THE CHAPTER SCOOP

news, notes, and nonsense from everywhere

by Jack Pitzer

Over $500 in premiums are paid by *Moon Lake*, Utah, Chapter to Junior exhibitors at their annual stock show. Classes for cattle, sheep. Horse classes —western pleasure and performance. Ribbons for open classes. Chapter members planning it.

N-N-N

Los Banos Chapter—in central California—planting area's first producing pecan orchard.

N-N-N

Joe Busby, former member of the *Santa Fe*, Florida, Chapter, is operating what is reported to be the only goat dairy in the state. It's Rose Hill Goat Dairy. Has 32 milking goats—each average two quarts per day. Sells milk for hospital uses.

N-N-N

Greenhands of *Elida*, Ohio, **Jim Brenneman and Bernard Stockton,** named Mrs. Foster Miller the champion hog caller at their Greenhand sponsored banquet.

N-N-N

FFA chapters might be able to add some money to treasury. Old milk cans are in these days with housewives. Painted, decorated—sell for good price. Used for decorations, umbrella stands, or flower planters.

N-N-N

A herd of Devon cattle—part of farming program for **Louis Adler.** State Farmer Degree winner of *Creswell*, Oregon.

N-N-N

Emery, Utah, Chapter sponsored an FFA record hop. Served goodies (popcorn, candy, root beer) and charged admission. Added lots to their treasury.

N-N-N

Clovis, New Mexico, Chapter members had wood hauling trip last winter. Cut fireplace logs in range management area. Used chain saws. Sold wood for $25.00 a ton. Camped out two nights and worked two days.

Mike Helleburg of the *West Linn*, Oregon, Chapter has copped high game (207) on chapter's bowling team. Chapter bowls Sunday afternoons in league. Team in league several years.

N-N-N

Long Valley, Utah, Chapter held annual open house. Had Chapter Farmer ceremony for **Verdell Chamberlain, Leo Campbell, Robert Roundy, Mark Campbell, Keary Workman,** and **Kyle Barton.** Members also gave demonstrations, displayed FFA and vo-ag projects.

N-N-N

Remember seeing Burma Shave signs along highways? *Flanagan*, Illinois, Chapter has their own Burma Shave type slogan posted at edge of town. "Our FFA—Is Here To Stay—We've Learned To Make—Our Home Farms Pay—Flanagan FFA Chapter."

N-N-N

Unique FFA Week activity reported by **Donald Rodgers** of *Turner Ashby*, Virginia, Chapter. Officers conducted morning devotions for student body.

N-N-N

Cider selling contest winner of *Thetford*, Vermont, Chapter is **Dwayne Stone.** Sold 35 gallons. Won $5.00 prize.

N-N-N

Tooele, Utah, FFA and FHA held annual roller skating party; 150 attended. Packed into two buses to get to rink.

N-N-N

When **Marcus Hill,** Texas state president, met California's president, **Paul Kresge,** he said Paul is soft-spoken, congenial, 6 feet 9 inches tall, and should be a Texan!

N-N-N

Paul Smith reports that freshmen of *Silver Lake*, Massachusetts, Chapter toured supermarket in Pembroke. Visited meat department. Saw steps of processing through packaging and sales.

Reporter **Lawrence Bruckner** tells of panel display from the FBI called "Evils of Communism." Used by *Thomson*, Illinois, Chapter at their banquet. Also had FBI agent as speaker. Part of chapter's American heritage activities.

N-N-N

Host of Wyoming State Convention —*Hot Springs County* Chapter in Thermopolis—joined forces with their school paper staff ("Bobcat Tale"). Published special newspaper for convention. Good idea!

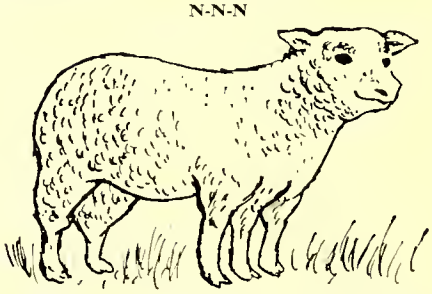
N-N-N

Chapter members at *Hannan Trace*, Ohio, erected a flag pole on the school grounds. Community service project.

N-N-N

Star Greenhand of area V in Texas is **Gaylon Atkins** of *Decatur* Chapter. Raises Holsteins. Is chapter vice president.

N-N-N



Esparto, California, Future Farmer **Pat Scribner** exhibited a five-legged lamb at San Francisco Cow Palace. Lamb's deformity is result of genetic condition. Lamb used extra leg for support while small. Doesn't use it now.

N-N-N

Saw a great picture of some Future Farmers on a field trip. But they weren't in jackets. Why not wear blue and gold when there's a camera man around?

N-N-N

George Smith, Jr. of *Hillcrest*, South Carolina, had no trouble capturing honors at South Carolina State Fair. Had only entry in Brown Swiss class.

N-N-N

Brookings, South Dakota, Chapter replaced two FFA signs and repaired two others in community. Smart thinking. No sign is better than beat-up signs.

N-N-N

I've got blisters from using this scoop. Let me in on what's happening —News, Notes, and Nonsense at your chapter.

One morning Bill Gill scooped up some Texas soil and solved a 200-acre cotton mystery.

He's a Shell representative.

Year after year the problem had been the same—poor-doing cotton growing in good, well-fertilized soil.

Root rot was suspected. So was excess soil salinity. Nematodes were known to be present in the area, but weren't considered important.

Bill Gill thought otherwise—because he knows nematodes, and how often they're to blame.

So he put a quart of the soil in a container and had it analyzed. That cleared up the mystery: analysis showed a serious infestation of reniform nematodes.

Bill advised fumigation with Nemagon® Soil Fumigant and the grower agreed to try it on part of his acreage.

Down went the Nemagon, killing nematodes as it moved through the soil. The cotton came up and grew with a vigor unseen in previous crops. Yield results showed that the Nemagon had paid for itself and returned a substantial extra profit on each treated acre. All 200 acres can now be farmed for full production...without the undermining attack of nematodes.

This kind of story is not an unusual one at Shell. *All* Shell Chemical sales representatives are fieldmen. They are continually gathering and working with firsthand information in their area. They're specialists who know their crops and their products.

People who sell or use Shell Agricultural Chemicals for cotton, corn, fruit, vegetables or livestock automatically get the benefit of products and techniques that are continually proven by men in the field as well as the laboratory.

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SHELL

That's what the girls are calling the guy who uses grease by the drum. Too bad it all goes on his hair, instead of into the lube fittings of his car. And never mind if there is an "ORK!" in his chassis, no matter how big a squeak it puts in his social life. Moral: don't be an "ORK." Lube it up at your American Oil dealer, the guy who makes you feel like an oil tycoon, even if you're down to your last dime. Just so he can say, and mean it . . .

Ork!

You expect more from American
*—and you get it!**

AMERICAN

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HOW TO RING FREEDOM BELLS

By John M. Pitzer

FREEDOM—A great idea often frilled with big words and deep thoughts that everyone just naturally accepts: a commodity which is all too often dished out to American citizens on a silver platter.

How many times have you been told about our rich American heritage? Each time you open an FFA meeting, you see evidence that our organization has developed from the glorious heritage of great men like George Washington and Thomas Jefferson. In fact, the cloak of heritage that surrounds American agriculture itself is a most valuable one.

Lest we lose it all—contented to merely be told about our American heritage—lest we become complacent—**We Must Ring The Freedom Bells.**

Needless to say, the fight to preserve what we cherish can not be fought with fist, nor with gun, nor by carrying signs of protest.

The war to preserve and strengthen freedom is a big one, but it must be fought. Here are some ideas of bells to ring—or actions—which you and your fellow chapter members will surely want to consider. They're ideas for things you can do!

How many of you can recite the National Anthem? In fact, how many know words to some of the other songs which have come up through the years to stand for America and all its majesty? Encourage the singing of our Anthem in your community. Spend a few minutes at a meeting to learn the words so you can sing along.

A letter to a congressman about current topics which affect our freedom would always be in order. Particular emphasis should be given to programs in agriculture.

The chapter might want to consider conducting a school assembly, perhaps with the FHA or another school organization, about our American heritage—freedom.

Chapter reporters could submit an article to the school paper or local paper about freedom and heritage. They need not always be about the chapter's activities in this area, but might be in the form of an editorial.

Former members who are servicemen now would appreciate a letter from the chapter or some of its members telling them that we are behind them 100 percent.

FFA members can no doubt help to make certain that the American flag is flown in their community and especially at their school. In fact, a school assembly might be about the proper respect due the flag, how it should be used, or how drapings and other patriotic paraphernalia can be used.

In fact, another good topic for a speech, a program, or special meeting might be the history of the American flag, past to present. Many Future Farmers will remember the pageant at the 1966 National FFA Convention entitled "Old Glory." Details and slides of this pageant will be available for chapters to use.

Our nation's heritage is vividly portrayed from coast to coast. Future Farmers can always benefit from making an effort to see historic sites across America. "Camera bugs" can do much for their own pleasure and for use at special events, note books, reports, and newspaper articles.

Another worthwhile trip might be to military bases which are open to the public.

Future Farmers might offer to be the color guard for a parade for a local community or even a state event. In fact, members could promote and organize a parade in their town. The old-fashion Fourth of July celebration is all too often masked by big emphasis on fireworks. Why not have a really old-time celebration—watermelon, band concert, and all. But don't wait just for the Fourth of July. Organize a FREEDOM Day. Go all out.

Some chapters might like to consider commemorating those who have carried on traditions of freedom and Americanism—perhaps a monument, award, or plaque. Even a scholarship to a college or community college might be called a freedom scholarship. Contributions to any organization that is doing work to promote freedom might be considered.

Future Farmers can vote in school elections and learn about actually voting when they are of age. Maybe they could help with the get-out-to-vote campaign for national elections.

What better place to promote the preservation of freedom than among elementary school children. Show them how to respect the flag, how to put it up, or how to say the Pledge of Allegiance correctly. Cooperation with other youth groups such as the Boy Scouts of America on the local level would be a fine project. FFA chapters could conduct poster contests and use window displays to promote freedom or to encourage citizens to fly our flag all year, not just on holidays.

Even emphasis for better diets and physical fitness among young people could be considered an effort to preserve freedom. How can we be good citizens if we are weak.

The area of beautification and conservation is one more place that would lend itself to special efforts. Every community has a park or roadside that could be cleaned or improved to make America more beautiful.

Four Human DYNAMOS

Where Footsteps Lead

It's not easy to follow in the footsteps of an older brother, especially if he's won every FFA honor in the book. But Monte Reese, Mooreland, Oklahoma, considered it an opportunity to hitch his wagon to a star, and he followed like a comet tail. Today he is vice president for the Southern Region, a national officer just like his older and much admired brother Nathan had once been.

Explains Monte, "The occasion was a program honoring my brother entitled 'This Is Your Life, Nathan Reese,' and all those who had been of help to Nathan in his FFA work were introduced . . . just like the TV show. It was then, while watching my big brother whom I admired very much, that I decided to do everything within my power to follow in his footsteps and become a national officer."

How closely he followed big brother is indicated by their FFA records which are almost identical. For example, they were both chapter president, state FFA secretary, state president, and finally a national officer.

Monte's farming program began with an Angus heifer given to him by his father when he was ten years old. By keeping her heifer calf and selling her steer, he increased his herd to two cows and had enough money to purchase two show lambs. Money obtained from the sale of the lambs and another calf was used to purchase a registered Poland China sow. He kept six gilts from her first litter, bred them to a registered boar he had purchased, and marketed over 90 head of swine the following year.

It was from his swine enterprise profits that he earned enough money to build the base for his farming program today. His program now includes 14 head of Angus beef cattle, one-third interest in 50 acres of winter wheat, and one-half interest in 404 acres of pasture land.

Looking to the future he says, "I have big plans for the future. I've spent too many hours in those hot, dusty wheat fields at harvest time. My plans are to move out of wheat production and into an all beef operation. The acreage now in wheat would be converted to an improved variety of Bermuda grass."

A $2,000 Bicycle Ride

Harold Brubaker, national vice president for the North Atlantic Region has always been out in front on the road to farming success. The summer before he entered high school he rode his bicycle to town to ask the local Mount Joy, Pennsylvania, banker for a loan to buy two cows and one heifer.

Young Brubaker planned to become a member of the Elizabethtown FFA Chapter and told the banker flatly that he planned to buy only the best, and therefore expected to buy only three animals with the $2,000 he wanted.

Harold got the money but spent it all on two animals. He paid $1,200 for one cow and $765 for the other. That expensive cow was later classified Very Good at 88 points with an Excellent mammary system. In addition, the cow has produced a record of over 23,320 pounds of milk and 765 pounds of fat. That $2,000 bicycle ride had set the foundation for building a winning dairy herd.

In the following three years, he showed his animals to ten reserve and grand champion honors and earned the title of Pennsylvania State Holstein Boy. His farming program continued to grow, and his senior year he was named Star Farmer of Pennsylvania.

When Harold earned the American Farmer Degree at the National FFA Convention this past year, he owned 25 head of dairy animals and 3,200 broilers. In addition he had a 50 percent interest in 124 acres of crops, including wheat, hay, corn, sudex, and tobacco.

Prior to his election, Harold had served as state FFA secretary and a member of the Pennsylvania Farm Commission.

Determination Nothing Could Stop

George Ropp, advisor to FFA's national vice president for the Central Region, traced Keaton Vandemark's growth in the FFA: "I think Keaton's interest can be traced to FFA public speaking. It started his sophomore year when he won the local and district contests. The following year, however, he was only a runner-up in the district contest and a very unhappy boy as he had hoped to go on to the state contest. I feel that this defeat caused a determination within Keaton that nothing could stop."

Keaton started his farming program with a single registered Ayrshire he calls Hanna. From this beginning, the Elida, Ohio, Future Farmer developed a program consisting of some 30 registered Ayrshires along with 100 feeder pigs and 260 acres of land. "Although my dairy enterprise is among my father's herd, I have complete responsibility for the management of my animals," Keaton points out.

Keaton's efficiency records prove that he ranks with the top dairy managers. His average is 14,880 pounds of milk per cow and 635 pounds of butterfat. The records also show a labor income per cow per year of $585.42.

"All of the livestock that I now own were either the result of offspring from original producing animals or were obtained by direct purchases," asserts Keaton. "The finances for these purchases and other expenses were furnished by returns from my dairy program along with the labor income from other farming enterprises."

Determination landed Keaton the presidency of the Ohio FFA Association during which time he spoke at 42 chapter banquets and traveled more than 20,000 miles. That same determination will add many miles and speeches to his record as he serves members on a nationwide basis.

Concludes Keaton, "I will serve my

These FFA'ers take the lead, spark ideas, trigger action, and set trends.

fellow members with all the strength, dignity, and humility that I can muster."

An Independent Businessman

Richard Morrison, FFA's national vice president for the Pacific Region, has always had an independent streak. Although his father conducts a large (4,700 acres) and successful farming operation near Gilbert, Arizona, Richard chose to develop his own farming program independent of the family farm.

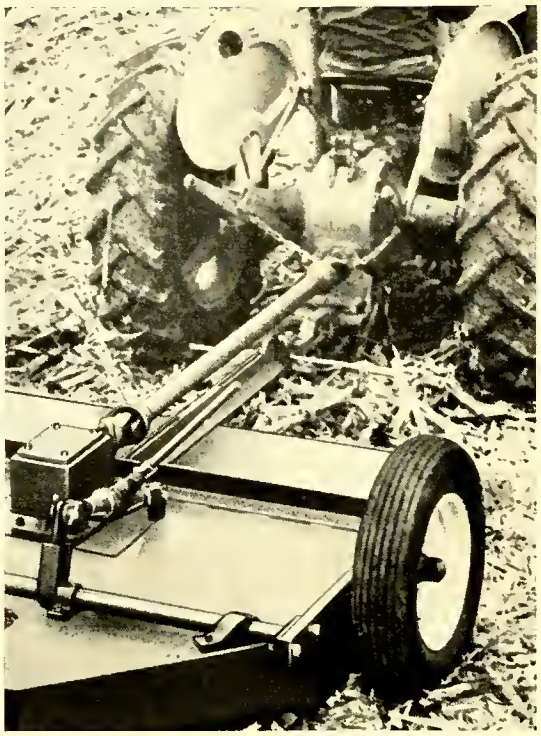
His 542 head of feeder cattle are custom fed by the Morrison Brothers Feed Yard, and Richard works as an employee at the large feeding operation. He explains how it all started, "I started with three acres of alfalfa and later purchased 100 beef feeder steers. I found these projects provided an exciting challenge. So I borrowed money from my father and uncle, to be paid back at 5¾ percent interest, and expanded my program."

Active in FFA judging, parliamentary procedure, and other chapter events he was soon chapter secretary. Notes Richard, "The FFA opened up an entire new world to me." His activities soon led to other chapter and state offices and finally to Arizona's state FFA presidency. Richard was also valedictorian of his high school class and won an award for the highest grade average of all vo-ag graduates in Arizona.

By the time he graduated from high school, his independent business had a net worth of $58,941, and he assumed complete responsibility. He explained, "I established my own business operation complete with industrial commission coverage, state tax commission account, insecticide application permits, and farm liability insurance."

Morrison's goal has been to establish himself solidly in farming and not enter the family operation until his father is ready to retire. Concludes Richard, "Establishing my own business in accordance with legal technicalities was an education in itself."

Left above: Monte Reese, Mooreland, Oklahoma, FFA vice president for the Southern Region, chats with Wisconsin president. He has many such meetings. Top right above: Keaton Vandemark, FFA vice president for the Central Region, is pictured with a registered Ayrshire. He keeps 30 head at Elida, Ohio, farm. Right above: Richard Morrison, vice president for the Pacific Region, lives on a 4,700-acre Arizona ranch. He has already started his own cattle business. Below: Harold J. Brubaker, North Atlantic Region vice president, checks plant population with Advisor E. S. Hess. His farm is in the garden spot of the world.



The twisting and turning of the pto, instead of a separate engine, operates this shredder.

PTO provides an extra engine

A guide to maximum usefulness

By Melvin Long

INDEPENDENT CONTROL of tractor power-take-off shafts provides most of the advantages of a separate engine on a haler, combine, or field chopper, without the necessity of buying an engine with each machine and then using it only a few weeks each year. To obtain maximum usefulness and keep repair costs low, here are tips to follow.

Industry-wide standards for pto hookups have been set. Thus, you can hitch one manufacturer's implement to a tractor made by another manufacturer. If your tractor has a non-standard-size pto, a conversion attachment is available from your dealer.

However, at the present time there are two standards in use. The older, long-established standard speed is 540 rpm (revolutions per minute). The more recently established standard has a speed of 1,000 rpm. During the extended change-over period while existing tractors and implements are still in service, two standards will continue. In time, the 1,000-rpm speed will be the single standard.

The standard 540-rpm pto tractor shaft is 1⅜ inches in diameter, has six straight gear teeth, and turns at 530 to 550 rpm in a clockwise direction when viewed from the rear of your tractor.

A standard 1,000-rpm pto shaft is also 1⅜ inches in diameter, but it has 21 curved gear teeth. Speed range is 975 to 1,025 rpm. It also turns in a clockwise direction when viewed from the rear of your tractor.

For best results with the 540-rpm pto, set your adjustable drawbar as follows: Hitch point 13 to 17 inches above ground level and in line, side to side, with the pto shaft; or hitch point 6 to 15 inches below pto shaft and 14 inches to rear of pto shaft. These settings impose the least stress on your implement's pto-shaft universal joints when you go over uneven ground or around corners.

With the 1,000-rpm pto, set the drawbar as follows: Hitch point 13 to 17 inches above ground level and in line, side to side, with the pto shaft; or hitch point 6 to 12 inches below pto shaft and 16 inches to rear of pto shaft.

If your tractor has a built-in tachometer, the correct engine speed for best pto operation will be marked on the dial. If your tractor does not have a tachometer, have your dealer check the pto speed and then mark the throttle setting that gives about 575 rpm with no load on the pto for the 540-rpm pto, or 1,050 rpm for the 1,000-rpm pto. The extra speed allows for a slight slowing down under load.

Most pull-type machines have a pto drive that consists of a short and a long shaft, three universal joints, a telescoping section, a slip clutch in the longer shaft, safety shields, an adjustable support for the front end of the longer shaft, and a coupler to attach the shaft to the tractor pto shaft.

Generally, the universal joints show first signs of wear if you do not use the proper hookup between tractor and implement.

The telescoping section allows the shaft to change length when you go around a corner or over uneven ground. On some machines, the telescoping portion of a shaft can be taken apart readily. If you have yours apart for any reason, such as making machinery repairs, be sure to reassemble it so the halves of the universal-joint yokes on each end of the shaft are in line. If one joint is a quarter turn out of line, the rotating parts of the machine will not turn at a uniform speed.

Your slip clutch should be adjusted so it "breaks" or opens when the machine "slugs" or becomes overloaded, but it should not slip excessively under slight overloads, or it soon wears out. Avoid getting oil or grease on the slip-clutch faces when you lubricate the machine.

Safety shields are provided by the manufacturer for your protection. Even though they are sometimes an annoyance when greasing, hitching, and unhitching, they should never be left off your machine.

Since the tractor pto shaft can be from 6 to 15 inches above the drawbar, the front support on the drawn machine is adjustable for height. This helps you get the three universal joints in line and reduces the load on the universal joints.

The coupler is prevented from pulling off the tractor pto shaft by either a latch or a pin. Be sure this fastening is properly secured. Otherwise it may come off before the telescoping action of the shaft occurs.

If your tractor pto shaft is rusty and dirty from not having been used, you

(Continued on Page 51)

NIGHT DRIVING

Driving in Another World

By A. R. Roalman

WOULD YOU DARE to wear, next time you drive, a thick piece of gauze that cuts your vision by more than half?

"Ridiculous!" you say. "That would be inviting a tragedy."

Thousands of young people do just that, however, whenever they drive a car at night.

"Driving at night is like driving in another world," according to the National Safety Council. And in rural areas you are three times as likely to have an automobile accident at night as you are when driving during the day.

The biggest difference between day driving and night driving is, of course, your ability to see. This basic difference makes your driving job much harder at night since 90 percent of what you do behind the wheel is determined by what you see and how well you see it.

Along with reduced visibility, there are a number of other hazards associated with driving after dark. You're usually more tired at the end of the day, and darkness can cause a feeling of drowsiness. Your mind has less to "see" at night, so it can wander more easily from the job of driving.

Fully 50 percent of all highway fatalities involve a drinking driver, and most drunks are on the road at night. (Drunken drivers kill sober ones, so just because you abstain doesn't make you safe.)

Traffic is lighter at night, and most drivers tend to increase their speed accordingly. More cars are likely to be parked along roadways at night.

There are many ways to compensate for these night hazards—most of them relatively simple—and the night does offer a few driving advantages. The trouble is that many drivers, particularly those with comparatively little experience behind the wheel, aren't aware of them.

Approximately 13,000 high schools in this country have driver-education courses in their curricula, but only two provide on-the-road practice at night. One is in Keokuk, Iowa, and the other in Janesville, Wisconsin.

Janesville High School's driver-education director, Norm Gesteland, cited what he considers the two biggest problems in driving at night: "Clues to possible hazards such as driveways, buildings, and playgrounds aren't usually visible. Also, beam blindness causes more accidents than most people realize. It's amazing how long a person's eyes take to recover from glare. Dashboard lights should be turned as low as possible to cut down on glare, and drivers should

(Continued on Page 44)

Vandalism of road signs is a growing problem. Spray paint on this sign will reduce its readability at night.

WISCONSIN
SEVASTOPOL

MECHANICAL HANDS INVADE THE ORCHARD

By Lew Richardson

THE COLOR PHOTO on the facing page tells quite a story. FFA's blue and gold represents the coming of a new breed of farmer and with them a new way of harvesting. Directed by Future Farmers James Smejkal and Wayne Spittlemeister, that colorful but weird looking monster can shake a cherry-laden orchard like a field of beaten corn. It's all a part of a new, fast, and efficient way to gobble your way through agriculture's last foothold on hand labor . . . fruit harvesting.

The trend to mechanical fruit harvesting is on the increase. Consider these facts: More than 16 million pounds of cherries were harvested mechanically in Michigan during 1965; 75 percent of Michigan's blueberry crop was picked with batch-type mechanical equipment, replacing 5,000 workers; one-third of Oregon's raspberry and blackberry crops is being harvested mechanically; and over 50 percent of California's tomato harvest was picked mechanically in 1966. With mechanical harvesting on the increase, you need to keep up with new developments.

At present, two approaches are receiving attention in the race to mechanize fruit harvesting. First is the mass removal techniques whereby the fruit is removed from the trees and transported to suitable containers entirely by mechanical means. The only labor involved is that needed to guide the machine and replace the containers. A second approach is to develop picking aids that reduce the workers' lost time.

Since the mass removal technique offers the most promise, Charles L. Peterson, agricultural engineer, and Anton S. Horn, horticulturist for the agricultural extension service at the University of Idaho have outlined these new techniques.

Cherries—Nearly all sour cherries are being harvested by shaking onto a light-weight picker frame like the one pictured. Catching frames are reportedly satisfactory, but limb attachment devices are causing some limb injury.

In harvesting red tart cherries when the total movement of the claw of the shaker exceeds 1,800 strokes per minute, 95 percent of the fruit is removed from the tree. Short stroke and high frequency removes more fruit and has less tendency for bark damage on the limb than does a longer stroke and lower frequency. Under testing, one-inch stroke with a frequency of 900 cycles per minute was found to be best.

At present, harvesting of sweet cherries for the fresh market must still be done by hand. Fortunately, price and labor still make this possible. The ultimate success of a harvester for fresh-market cherries will hinge on its ability to pick the cherries with their stems intact.

One possibility is a mechanical fruit picker invented by I. W. Richardson of Lady Lake, Florida. The fruit harvester reportedly combs the branches to strip fruit from the tree, simulating the snap twist action of hand picking. The picker head is raised and lowered through the tree on a tower which can be rotated 180 degrees and tilted as much as 30 inches to follow the contour of the tree.

Apples—Apples bruise very easily; an apple dropped from a height of six inches will bruise. Apples have a reputation for being packed at a very high quality, made possible by careful harvesting practices. Apples are shaken for processing use, but the bruise susceptibility of apples leaves little hope for successfully shaking apples for the fresh market.

One machine designed recently by agricultural engineers at Cornell University attempts to overcome the problems of harvesting bruise-free apples in an ingenious way. Still in the experimental stage, the machine has a massive bank of padded prongs which are inserted into the tree to shake the branches. Branches may be shaken either horizontally or vertically as desired. The loosened apples zigzag through the prongs onto a catching frame and then roll to a box filled with water. The main goal of the machine is to pick bruise-free apples suitable for the fresh market.

Grapes—The conventional systems of training grapes do not lend themselves to mechanical harvesting. However, the newer Geneva double curtain system not only results in increased yields and better quality, but is adaptable to mechanical harvesting.

In this system, vines are trained to a bilateral cord and are short pruned. The elongated trunks are secured to a horizontal wire located 5½ to 6 feet above the vineyard floor. There are two of these cordon supporting trellis wires, located four feet apart, for each row.

The Chisholm-Ryder Company of Niagara Falls, New York, has manufactured a harvesting machine to be used with the Geneva double curtain training system. Fruit is removed by shaking the wire between 350 to 420 strokes per minute. The fruit is shaken off as whole berries or clusters of two or three berries. The machine has two picking heads and picks both sides of a single row.

Prunes—Prunes for processing are being shaken satisfactorily. Growers are looking forward to shaking prunes for the fresh market.

Pears and peaches—No mass removal technique is available for either of these fruits at present.

As you will have noted, the primary fruit harvesting equipment is the shaker. There are a number of different types of limb attachments in use but the latest findings indicate that the permanent bolts (a ¾-inch bolt is permanently installed in the trunk of the tree) or belt pads (a felt belt contacts the tree) are the best from the standpoint of limb injury.

New orchard management practices will improve the rate and quality of harvest when using mechanical shakers. These practices are suggested:

- Remove low branches that may obstruct catching frames.
- Provide visibility to the point where the shaker attaches to the tree.
- Keep the number of main supporting limbs to a minimum (three or four limbs would be desirable).
- Provide a smooth orchard floor free of ruts, large stones, large weeds, and mounds around trunks.
- Harvest at proper stage of maturity.
- Schedule harvest according to fertility levels.
- Orient the branches to the same relative shaking direction in the row.

Store-Door DELIVERIES

May give you an edge!

Breaking the entry barrier

CHANCES ARE YOU were fascinated by the way National FFA Secretary Paul Tarpley (April-May, 1967, issue) made his start in farming. He grew purple hull peas and earned enough money by selling direct to start a beef cattle enterprise. Can you use his method in an effort to break the entry barrier into farming?

With the number of farms dwindling and the trend toward larger farms, the small and medium-sized beginning farm operator needs new market outlets that do not call for the huge volumes required in the normal mass marketing systems to which large farms cater.

One possibility is direct marketing where the farmer sells and delivers produce directly to the retail food stores, both independent and chain-operated. The advantages, disadvantages, and future of this type of marketing was reported in a recent survey conducted by the Food Business Institute of the University of Delaware in cooperation with the U.S. Department of Agriculture.

Three-fourths of the farmers contacted in the national survey said it was the most profitable marketing method available, and they believed it should stay that way. As one optimistic farmer commented on store-door deliveries, "Unlimited future . . . chains need and will pay for this service." Another summed up two major advantages, "Store-door selling should have a good future, because the grower can get produce to market fresher and in better condition."

There are other advantages for the grower, the foremost being a relatively stable season-long outlet for quality produce with a fast turnover and premium prices. Containers can be reused, helping the beginning farmer reduce marketing expenses. Durable field crates and boxes are used by most farmers: picked up and reused for a savings of 25 to 50 cents per unit.

The system can offer an excellent way to build up a reputation for top quality produce and to increase direct-to-the-customer sales. In one case, a grower reported, "Many chain store customers saw our truck, copied our address, and drove forty miles or more to buy large orders right from the farm."

However, store-door delivery operations have certain drawbacks. For instance, some retailers are unable to allow more than a few hours between ordering and delivery. Very precise production scheduling is necessary, particularly if the retail stores are unable to give specific estimates of the amount of produce they will require. If the grower must hire additional labor to make store-door deliveries, he may find dependable employees difficult to hire.

Also, it is extremely difficult for growers to contract for a season ahead to deliver a specified quantity of produce at a specified time due to variable factors of weather and yield. Retailers are also reluctant to agree to seasonal contracts, because they keep retailers from bargaining effectively. Therefore, contracts are often made for a week at a time.

According to the Food Business Institute study, growers planning to begin store-door delivery operations should study several factors carefully: Will additional capital be needed for equipment? What is the probable return for available contracts? Is adequate labor available? Can additional crops be grown to help share the delivery cost of regular routes? How does the cost per mile and per hour involved in serving a particular group of stores compare with other outlets?

Produce buyers and field buyers for several large food chains were also interviewed. They reported this delivery system puts fresher produce into the store, increases sales, and pleases consumers. Spoilage and expensive handling are held to a minimum. The disadvantages they reported involve store secur-

ity, paper work, and trained personnel to inspect the delivered produce. The problems have all been solved to the satisfaction of many supermarkets using the system, the Food Business Institute notes.

The key considerations for store-door delivery selling of farm produce are these:

- Larger chains tend to select farmers who have large operations and can deliver sufficient quantities so the retailer can promote to a number of stores at once. Also, to the disadvantage of the beginning farmer, they tend to give preference to farmers with a few years' experience.
- Contracts are used for less than 10 percent of the transactions, both partners in the venture relying on verbal understandings that are characteristic of the produce trade.
- Farmers normally do not guarantee sale but do guarantee uniformly good quality.
- Preference is given to those farmers who can provide a number of commodities.
- Prices are tied to quoted market prices. The large chains which are enthusiastic about store-door deliveries point out that they are extremely fair in interpreting these prices, and that doing so pays off in terms of farmer loyalty with respect to quality. Independent retailers report that the cost normally is the same as for produce from other sources, "the market" price. Often there is a slight advantage to the farmer, price wise. Quality is awarded with a premium, and there is a major savings in container costs.
- Daily delivery is specified, with about 75 percent of the volume arriving on Thursday, Friday, and Saturday as a rule. Delivery times are adhered to regularly.
- Demands upon the store-door operator for consumer unit packaging are growing. This would require additional capital investment on part of the farmer but would help ensure continued retailer patronage.
- A preseason conference with store-door producers and a post-season conference to discuss pricing, deliveries, new quality standards, and payments are believed by one of the major chains to account for its highly successful farmer relationship.

The future potential of this system to the young farmer trying to break the entry barrier is indicated by the fact that one of the largest chains in the country buys as much produce by this system as it can get reliable farmers to deliver. The head buyer said in an interview, "I can't wait for our store-door delivery arrangements to get started each year. Our produce business always goes way up when the top quality local products come in!"

Texico Chapter President Allan Breitenbach, right, greets State President Bobby Richardson upon his arrival at the chapter. Bobby attended a chapter meeting and then went to see some of the members' supervised farming programs.

16,000 Miles Through the Land of Enchantment

THAT'S NEW MEXICO! State FFA President Bobby Richardson visited all 56 chapters in his state and traveled 16,000 miles to do it.

Chapter visits by state FFA officers are not unusual. More than likely an officer visited your chapter. There are many pleasures involved in making these visits, and Future Farmers develop many friendships. But there is also a great deal of planning involved.

New Mexico's president tells about the preparation he made to visit chapters and about some of the highlights of his trip.

Bobby spent four months traveling throughout the state visiting chapters. Before he set off on his travels, he sent a letter to chapters to tell them he was coming. He also sent an article to the local newspapers to announce his approaching visit in that community.

In order to be well prepared for any occasion, Bobby prepared several talks for situations like chapter banquets, Greenhand meetings, Chapter Farmer meetings, civic organization meetings, and high school assemblies.

When he arrived at a school, he made special efforts to meet the school principal and superintendent. Of course, he was prepared ahead of time to have in mind the names of the chapter officers, the chapter advisor, and know some of the chapter's latest activities. (These he read in the state FFA publication called the "Sunshine Future Farmer.")

Bobby's visit usually included a chapter meeting, a meeting with the chapter officers, and visits to members' farms after school to see supervised farming programs. He also came prepared to show slides of the FFA in action and brought along mimeographed materials to pass out.

Like other state FFA officers, Bobby finds it difficult to express the pleasure and satisfaction of such an experience. For him, it was indeed 16,000 miles through the land of enchantment!

SYNTHETIC FOODS ARE

Backers of these new foods compare their potential to that which oleomargarine now enjoys. Here's how they will affect your future.

SYNTHETIC FOODS are here, and Future Farmers should take heed. K. A. Harkness, ag engineer at Ohio State University, told a food marketing meeting recently, "It's time to stop thinking of agriculture as corn, soybeans, beef, and pork. It's time to look at the real value of a crop." To understand what he means, note that food protein can be extracted from all kinds of materials, even the magazine you are reading. In fact, 100 pounds of paper can theoretically yield 24 pounds of food protein, or the same amount as in 135 pounds of hamburger.

"Sure," you laugh, "but I don't think *The National FUTURE FARMER* would taste as good as the 'steaks' I have growing out back." Consider what Dr. L. M. Beidler, a Florida State University biophysicist, predicted at a Michigan food-science symposium: "By chemically manipulating the response characteristics of your taste buds, it is expected that the taste world of an individual can be temporarily altered." His research has uncovered taste inhibitors that can, for example, change the sourness of a raw lemon to the sweet taste of an orange.

What's more, many scientists believe that the food chain must be drastically shortened. They point out that the feed-conversion efficiency of a beef steer is too low . . . about 7 or 8 percent. But, they add, this can and has been increased some ten-fold by new methods that call for creating a whole new group of foods from spun protein.

Don't be misled into believing that these foods are years in the future. Note these facts:

- The dairy industry is already reeling from the introduction of imitation milk designed to compete against fluid milk, the big boy of the dairy industry. Eleven California firms are already licensed to manufacture imitation milk. This product gives a higher margin to the grocer and still passes on a 10-cent savings to the consumer over genuine milk.
- The Food and Drug Administration has just recently approved the use of whole fish protein concentrate. Congress has already authorized a pilot plant for production.
- General Mills, Incorporated is already market testing some textured new foods, some of them similar to meat, made from soybean oilseed protein powder, according to Dr. A. D. Odell.
- Worthington Foods, Incorporated, Worthington, Ohio, is a company specializing in making meatless meats. Worthington's spun soy protein fibers resemble chicken, beef, ham, sausage, corned beef, chipped beef, frankfurters, and turkey. They can appear in slices, roasts, cubes, chips, granules, round rolls, and . . . you name it.

These are facts. They should not scare Future Farmers but instead make you think, as Harkness suggests, about the *real* value of the products and crops you produce. You are selling more than corn or beef; you are selling proteins, fats, and carbohydrates. Protein is the most important. In many cases these new foods can actually improve the markets for natural foods. But they should also make you realize, as Dr. Richard Kohls of Purdue told the same agricultural marketing meeting, "The firms which operate between farmers and consumers have the power to influence the behavior of farmers and of consumers for their own interests, and they often use it."

Let's look at several groups of new foods to see how scientists have adopted new technologies into structuring these products. John V. Ziemba, senior editor of *Food Engineering*, outlined the development of new products during an agricultural industries conference at the University of Wisconsin.

Fats and oils are the first group you might consider. Making a lard-type product out of vegetable oils called for a chemical trick, hydrogenation, to form a saturated fat . . . or a solid resembling lard. Then to be competitive, lard had to be chemically modified to "engineer" new properties into it.

Spun soy protein fiber is the basic ingredient used in many synthetic foods. It is a prime protein source.

HERE

By Len Richardson

In the not-too-distant future, still another chemical trick, catalytic oxidation of petroleum hydrocarbons, will be used to make edible fats.

Nut-like products are made to closely resemble actual nuts. Just about any variety of nutmeat can be simulated through selective use of ingredients. They can be flavored similarly to or differently from regular nuts. They can be given any shape and any degree of bite or mouth feel.

They're made by blending dried egg whites or similar materials with a filler, like cottonseed oil, containing dried ground wheat germ. Water is added, and a slurry is created. The gel is then extruded into molds and dried. These shapes are then roasted to bring out a nutty flavor.

Dairy-like products have been tailor-made from special lipide systems. Imitation milk is composed of water, vegetable oil, non-fat dry milk, an emulsifying agent, and a stabilizer. The oil is usually soy, cottonseed, or a blend.

Unlike butterfat-containing dairy foods, these are built up from specially designed vegetable fat-emulsifier systems. Each fat's composition is juggled to give it properties technologists want. Soon we can expect "cheese-like" products resembling Swiss, cheddars, and others made from this system.

Specially-coated bite-size dessert items have been fabricated for astronauts. Look to the adoption of this technique for the production of such items as fruit-juice tablets, freeze-dried shrimp, beef-stew bars, or other laminated foods. The latter, a Pillsbury creation, consists of thin sheets of catsup, barbecue sauce, onion, gravy, soya sauce, and pickle relish . . . all laminated together.

Foods spun from soy protein isolates represent one of the more exciting developments. They're made to look, taste, and chew like meat, poultry, and seafood products. This protein isolation and synthetic fiber process was pirated from the textile field. Soy protein is spun much like nylon or rayon is in textile mills.

Spinning is through an extruder that converts protein into edible fibers. Tenderness, or toughness, and nutritional levels are adjusted at will; so are flavor, color, and taste as well as the shapes and sizes . . . whether they're cubes, slices, bits, or granules.

The process isn't limited to soy proteins. What nutritional shortcomings soy protein might lack can be overcome by the addition of other proteins. Meats themselves can be incorporated. Matter of fact, one soup manufacturer is already using a chicken meat containing soy protein fibers in its dehydrated mix.

Simulated "ground beef" should sell at half the price of cooked hamburger. Other "meat-like" products should run one-third to one-half the cost of their cooked counterparts. Housewives will have them on their shelf in dehydrated form. Already available is General Mills' bacon bits or Bac Os in a 3½-ounce jar. Product tastes like bits of fried bacon.

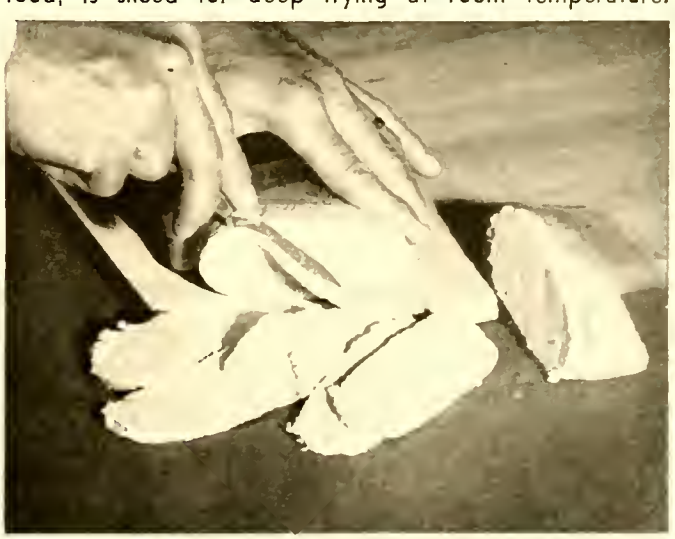
What's to come? To listen to food technologists, we might see chops and steaks in charcoal-flavored plastic overwraps which are edible. Cereals may come in cherry-, raspberry-, or banana-tasting cartons or inner liners. You will eat carton, liner, and all.

Beef burgundy, beef stroganoff, chicken fricassee, turkey à la king, and lobster Newburg may be processed into temperature-controlled cans. They'd be ready to serve, hot or cold, right out of the can. Some containers may even have silverware and dishes built into them to do away with table-setting chores.

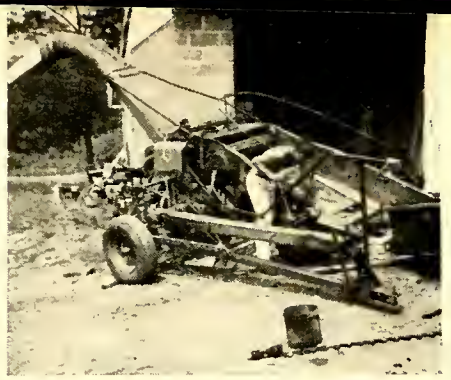
As reported in "Looking Ahead" (February-March, 1967), scientists may farm oil to produce protein suitable for human diets. An even further peek into the future will show salt water farmers breeding and hybridizing certain seaweeds into sea fruits and vegetables; perhaps something like sea cranberries, sea peas, beans, and cabbage.

Hungry? Here is a selection of club sandwiches made from meatless luncheon meats. Taste is same as meat.

A plastic package of Tempeh, an Indonesian soybean food, is sliced for deep frying at room temperature.



Frank performs regular maintenance on the farm truck and keeps it running.



A good welder is handy when things go wrong during harvest or planting time.

Proper adjustments and regular repairs make machinery life expectancy longer.

Master Mechanic

When things go wrong on the farm, it's good to have a man like Frank Clifford around to fix them.

"MECHANICAL WORK has always interested me," says Frank William Clifford, national winner of the FFA's agricultural mechanics proficiency award. A member of the Belvidere, New Jersey, FFA Chapter, he is the son of Mr. and Mrs. Frank V. Clifford.

Frank comes by his mechanical interest naturally. He explains, "My dad is an excellent mechanic and farmer. He also studied vocational agriculture at Belvidere High School and became a member of the FFA chapter one year after it was organized. While a member of the FFA, he took an active part in the construction of the Belvidere High School vocational agriculture building. Both my dad and I have the same FFA advisor, Mr. Harry Schnieber."

The 247-acre Clifford dairy farm is located in Knowlton Township near the village of Delaware, New Jersey. Corn, oats, and hay are the Cliffords' main crop enterprises.

Frank traced the development of his farming program. "When I was ten years old, I joined the Delaware Valley 4-H Club and purchased my first pure-bred Holstein heifer calf. At the same time I entered Belvidere High School, I joined the FFA and dropped out of the 4-H club. I used my heifer to start my farming program. I purchased my second calf during my first year in high school."

Thus, with the help of an FFA calf chain, Frank's program has grown so that today he owns four registered Holsteins, four acres of corn, two acres of oats, four acres of clover hay, two hundred strawberry plants, and one-fourth acre of potatoes. Frank hasn't had all luck however. "So far I have had only one heifer calf which I turned over to the calf chain. All of the rest of my calves have been bulls," declared Frank.

In addition to his supervised farming activities, Frank has always been interested in mechanical work. Affirms Frank, "I have enjoyed working on our machinery and helping other FFA members with their work in the school's farm shop."

The vocational agriculture shop as well as a good home farm shop has provided the facilities to enable Frank to excel in agricultural mechanics. In four years of vocational agriculture and the FFA, he has overhauled ten farm tractor engines, two farm truck engines, and numerous smaller engines.

His knowledge of hydraulics helped him to install a power lift on a farm tractor and a hydraulic hoist on a 1½-ton truck. Many of Frank's projects have helped on the family dairy farm such as a snow plow, three wagons, and 1½ miles of fencing. He also helps keep the farm's many implements in working order with regular grease jobs. Considering that there are 28 pieces of equipment on the Clifford farm, you can understand the time involved in just this one undertaking.

Frank's mechanical know-how also contributed to the farm's improvement. Among the projects he has helped to construct or install are a 20- by 20-foot garage, a pole corn crib, a barn cleaner, and a pump.

Not all of Frank's know-how has been devoted to building for the farm. His records also show one fun item, a "go-cart" which he built and powered with a Briggs and Stratton engine.

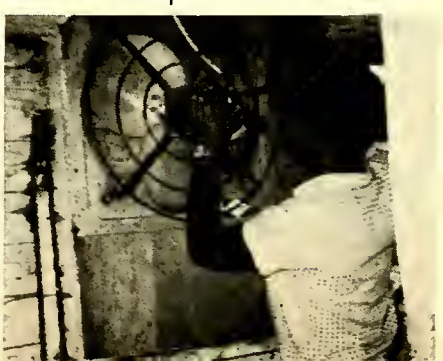
Always an active member of the FFA, Frank has held offices on the chapter and district levels and represented his chapter at two leadership training conferences. Outside the FFA he has served as a member of the Knowlton Township Volunteer Fire Company and was a delegate for Belvidere High School to New Jersey Boys' State.

"At the present time, I am working on our farm with my dad for wages and am planning to enter into a partnership arrangement with him," concludes Frank. Then he adds, "I hope to do some mechanical work on the side in addition to farming."

Frank takes on some real big jobs like replacing this head for their chopper.

He is also plenty familiar deep inside a tractor motor that needs to be fixed.

Of course there are lots of small jobs that need the special mechanic's touch.



World Wide Hide Hunt

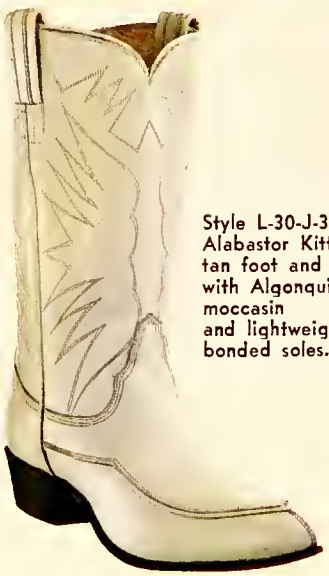
To make the world's finest boots Tony Lama searches far and wide to get the leathers! As you look through these pages you will see why Tony Lama bootmakers have the top reputation for styling unusual hides and finishes. Every leather is crafted by hand into unmatched authentic western styles which have created Lama's fifty-five years of bootmaking leadership.

Unquestionably the toughest leather of them all, Sharkskin's distinctive furrowed grain makes it a handsome styling leather as well as extremely durable. There is a major difference between the artistic way Tony Lama's handcraftsmen work the leather with special new soft-tanning processes and the frightening task of bringing one of these critters out of the sea.

The Elephant has been used for centuries to do some of man's toughest work. The Romans used these highly intelligent and easily trained beasts in warfare. The tusks provided the only valuable part of the animal until Lama's leather hunters learned how to tan the hide to create a tough but comfortable leather. Lama's new Elephant hide boots are big news in the boot world.

Tony Lama CO. INC.

WRITE FOR THE NAME OF YOUR NEAREST DEALER 1137 Tony Lama Street, El Paso, Texas 79915



Style L-30-J-3, Alabastor Kitty tan foot and top with Algonquin moccasin and lightweight bonded soles.

Style L-1539J-3, treebark Kitty tan foot and top with algonquin moccasin and lightweight bonded soles.

Style L-1539-J-3, aniline benedictine Kangaroo with chocolate genuine Alligator wing tip and lightweight bonded soles.

Tony Lama offers a fine selection of ladies boots which are distinctive, feminine—and handcrafted too, exactly like the men's for genuine comfort and long wear.

For work or dress in style and comfort, wherever you go there is a Tony Lama boot for you. Lama's imaginative design and authentic western styling will be recognized as the best everywhere! Choose Tony Lama boots . . .

DECIDE WITH PRIDE!

Whales, the giants of the sea, are kept warm by thick layers of blubber covered by a surprisingly thin layer of skin. When Tom Edison started the revolution to electric light, the oil in Whale blubber became less in demand. But with the hard work of modern tanners and the talented toil of Tony Lama leather craftsmen, the skin of the Whale is becoming one of the most popular new boot leathers.

The world's greatest leathers are worked by hand to create Lama's magnificent styles. Over twenty-seven hand operations go into the making of every Tony Lama boot. You would have to go a mighty long way to beat Lama's great combination of expert handcrafting and the world's finest leathers.

Tony ★ Lama CO., INC.

Style 39-J-3, black Water Buffalo foot and top.

Style 39-J-3, antique Sealskin foot with chocolate Nurocco top.

Style 182-T-3, in aniline tanned sorrel Kangaroo

Style 195-T-3 in aniline tanned treebark Kangaroo

Style 939-J-4 in Cheyenne Rawhide foot and top.

Style 520-T-4, genuine chocolate Sea Turtle with algonquin moccasin styling.

Style 521-T-3, chocolate genuine Alligator foot and top. Top features new diamond-pieced pattern and foot is in algonquin moccasin styling.

GOLD LABEL BOOTS

These are the ultimate in boot-making. Lama's Gold Label boots feature outstanding leathers and extra attention to finish and detail. They are the finest you can buy—anywhere!

SHOW BUSINESS CELEBRITIES

Their shelves full of awards tell the story: singer **BUCK OWENS** and his Buckaroo Band are everybody's favorite now days in the Country-Western music world.

CHARLIE WALKER, one of the Country-Western music's brightest stars, hails from San Antonio, now makes his home in Nashville, and travels the world over entertaining millions with his special brand of song styling.

All-time great singer-bandleader **HANK THOMPSON** has turned the trick that makes a real pro; he has stayed on top with consistently good Country-Western music for two decades.

WILBUR PLAUGHER is a rodeo-contestant, turned rodeo-clown, turned movie-star—and everyone who has seen him in action knows he is great at all three!

SLIM PICKENS, who spends most of his time now starring on TV and in the movies, traveled the rodeo circuit as contestant for a lot of years before going to Hollywood.

Style 07-J-5 in Gunstock foot and top.

All over the western entertainment world Tony Lama is the personal choice of the top stars. Take it from me, and from my friends whose pictures are shown here, Tony Lama is first place every place with us!

Rex Allen

IN STRIDE WITH THE STARS

Style 200-J-3, chocolate Cariobu on chocolate Calf in new algonquin, moccasin styling

FAMOUS RODEO PERFORMERS

A man who is building a legend, **DEAN OLIVER** is already tied for the all time most Calf Roping titles and has stacked up three All Around Championships in the process.

This year's World Champion Bull Rider **RON ROSSEN** won the title once before and has twice captured the NFR championship with his special brand of muscle and guts!

Rising fast in rodeo circles, ex-collegiate star **SHAWN DAVIS** won the 1965 World's Bronc Riding Championship and has been selected to serve on the R.C.A. Board of Directors.

The Rodeo World selected charming **NANCY ANN SIMMONS** of Omaha, for her beauty, taste in western dress, and horsemanship, to reign this year as Miss Rodeo America.

1965 World Barrel Racing Champion **SAMMY THURMAN**, whose Indian heritage is evident in her beauty and riding ability, is performing her riding skills before new audiences in a recently launched movie carrer.

Can Chapter Boosters Be Organized?

THE MONTEVIDEO FFA Chapter, Penn Laird, Virginia, has the only FFA chapter Foundation in Virginia and one of the few in the nation, according to Tim Wagner, chairman of the chapter's public relations committee. Organized in 1963, there are five purebred livestock chains being operated on funds provided by the Foundation. The livestock chains supply purebred animals for chapter members.

Success of the Foundation is based on specific purposes outlined in a brochure published by the chapter. They are:

- To improve livestock in Rockingham County through registered animals.
- To encourage Future Farmers to raise registered animals as their productive enterprise in vo-ag.
- To provide a special fund for students of vocational agriculture to finance chapter chain projects.
- To assist Future Farmers in becoming established in farming and related occupations.
- To stimulate cooperation between local business concerns or individuals of the county and the FFA through a Foundation.
- To teach good management and business practices through livestock enterprises.

During the 1966-67 school year, there have been dairy, beef, sheep, and swine chains operating under the chapter Foundation. Once the first offspring from the original livestock is returned to the Foundation by a Future Farmer, the mature animal becomes that Future Farmer's property.

All total, the chapter has 68 registered purebred animals in various chains valued at more than $7,000. This growth has been made possible by 22 donors to the Montevideo FFA Chapter Foundation from Rockingham County. In addition, the Foundation has $929.56 in its treasury.

The organization of the chapter Foundation consists of three officers and an executive committee of eight. The officers and executive committee are elected for a one-year term. This year's officers are Stephen Saufley, chairman; Bruce Bowman, secretary; and Larry Morris, treasurer. The Foundation's executive committee is made up of Stephen Saufley, chairman of the supervised farming committee; Franklin Salyards, chairman of the earning and saving committee; and Charles Hoover, chapter president. Other members include the representatives of two of the Foundation's donors, the Rockingham Farm Bureau Co-op and Valley of Virginia Milk Producers. Also on the committee are the chapter's three FFA advisors, Mr. Arthur Mitchell, Mr. J. M. Kline, Jr., and Mr. Dwight Newman.

The officers and members believe that much of the success can be attributed to basic rules which govern the Foundation. They are:

1. Only individual business concerns doing business within Rockingham County may be members of the Foundation.

2. Rules governing this Foundation shall be approved by the executive committee and the Montevideo FFA Chapter.

3. All money received from the donors or from chain projects shall be kept in a bank under a special FFA Foundation fund.

4. All animal enterprises given to Future Farmers shall be put on a contract stating requirements of feeding, management, and breeding.

5. Only young men in classes of vocational agriculture at Montevideo High School shall be eligible to receive chain livestock enterprises.

6. All donors to the Foundation shall be invited as guests to the FFA chapter parent banquet.

7. An annual meeting of the FFA Foundation shall be held for the purpose of reorganization and conducting necessary business.

8. As long as sufficient funds are available, no donor will be solicited.

9. Dairy and beef animals shall be given largely to eighth and ninth grade students, providing they take vocational agriculture two or more years.

Four years of operating their own FFA Foundation has convinced Montevideo Future Farmers that it is possible to organize your local support and in so doing provide assistance to fellow Future Farmers.

Above, Jerry Raines holds one of the registered Angus which belongs to the Foundation. Below, William Cook holds some of the Foundation's dairy stock.

Farm Shop Feature

Editor's Note: The National FUTURE FARMER *needs farm shop project ideas of items that FFA members can build. We will pay $20.00 for the best idea published in each issue and $10.00 for each additional item used. Submissions must include a clear black and white photo along with a brief yet complete description of materials used and a few pointers on how to build.*

Completely Adjustable Positioning Clamp

EVER TRY to work on a shop project and find that you just couldn't get it to fit into the vise the way you wanted it to? Here's a device that can solve this problem and make it easy to work on "hard-to-hold or position items."

Items needed are:
2—4″ "C" clamps
3—machine bolts 2½″ long
3—⅜″ rounds 3½″ long
1—¾″ pipe 4″ long
1—¾″ pipe 6″ long
1—¾″ pipe 12″ long
1—¾″ round 8″ long
2—¾″ rounds 12″ long

Drill a ⅜″ hole in the center (half way from each end) of the 4″ and the 6″ pieces of ¾″ pipe. It would be best to drill a lead hole ⅛″ in diameter and enlarge it to ⅜″. Use the same procedure to drill a ⅜″ hole two inches from the end of the ¾″ pipe 12″ long.

Then heat and flatten the other end of the ¾″ pipe, 12″ long at right angles to where the hole was drilled. Weld the ⅜″ nuts over the ⅜″ holes which were drilled in the three pieces of pipe.

Weld the ⅜″ rounds, 3½″ long to the head of the ⅜″ bolts and make 3 "T" set screws.

Weld the bottom of one of the 4″ "C" clamps to the flattened end of the ¾″ pipe. If it is a malleable cast iron clamp, weld with a nickel electrode.

Weld one of the ¾″ rounds, 12″ long to the center of the ¾″ pipe, 4″ long just opposite the ⅜″ nut that was welded on.

Assemble ¾″ round which was welded to the ¾″ pipe, 4″ long into the opposite end of the ¾″ pipe that was welded to the 4″ "C" clamp and tighten "T" set screw which is two inches from the end of the ¾″ pipe, 12″ long. *Note:* You may have to use a ⅜″ tap to clean any weld spatter out of the ⅜″ nuts welded on the pipe. Also, holes ⅛″ deep can be drilled into the ¾″ round which fits in the ¾″ pipe at two-inch intervals to give a more secure "T" set screw adjustment for height.

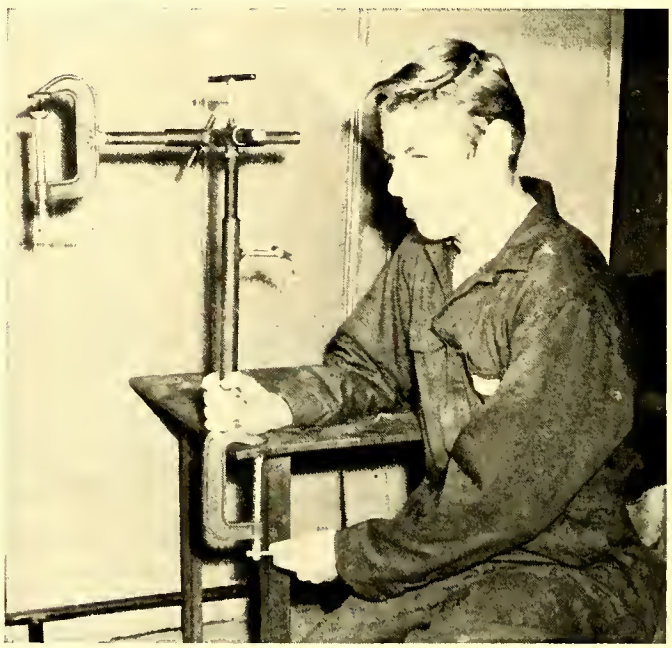
Weld the ¾″ round, 8″ long to the center of the ¾″ pipe, 6″ long just opposite the nut which was welded on. This ¾″ round slides into the ¾″ pipe, 4″ long. Then tighten "T" set screw. It is the top one in the photo.

Weld the other ¾″ round, 12″ long to the center of the back of the other 4″ "C" clamp. (Use nickel electrode on a malleable cast iron clamp.) This ¾″ round slides into the ¾″ pipe, 6″ long. Tighten up "T" set screw. (It is the "T" set screw in the center.)

This idea was submitted by Mr. Arlyn W. Hollander, vocational agriculture instructor at Markesan High School in Markesan, Wisconsin.

Jack uses the handy clamp to position and hold the share in the top "C" clamp before starting to hard surface it.

Markesan Future Farmer Jack Bremer is shown securing the completely adjustable positioning clamp to the work table.



Do Parents Enjoy Teenagers?

Our Readers Speak Out!

Here are the winners and quotes from entries in the "What I Think" contest which appeared in the February-March issue. Questions were "Do parents enjoy teenagers?" and "What about the value our society places on youth?"

WINNER

Do parents enjoy teenagers? Ask that question of most parents, and they would laugh. Johnny is never home. How could we enjoy him—we never see him. But wait parent. Stop and think that question over. Most parents who do stop and think realize they do enjoy teens—how could they help it. They enjoy watching teens enjoy themselves.

Understanding adults can see the glowing future of our country in today's teenager. Today's teen is tomorrow's leader. Most parents understand that times change and so do teens. They enjoy teens' changing ways, growing up, and becoming adults. They can see themselves in our generation, and they see teenagers facing essentially the same problems they faced. After all parents were teens too!

Teenagers of this generation have initiated more change than perhaps any other generation. Long hair, "mod" clothes, and a music standard mark our generation. This is not a sign teens are rebelling, revolting, or whatever. Teens are merely in search of improvement through change; whether they are right or wrong in this instance is another question. Many parents realize what most teens are seeking and sympathize with them. The clash between parents and teens occurs when an adult does not understand the motivations behind the teens' unusual behavior. Understanding parents, who realize that teens are no different than they, enjoy their teenagers.

Teens crave fun—the kind of fun that also might be enjoyable to adults: Swimming, surfing, a pillow fight, basketball, a sock hop, or a Beach Boys' concert are fun —no matter if you are a teen or an adult. Most teens appreciate a parent who can join in their activities and have fun doing it. So parents join in the fun; this younger generation may amount to something yet!

Tom Brosey
New Carlisle, Ohio

WINNER

I think the value society places on youth makes parents' relationships more difficult, because most of the things teenagers do today are found to be almost impossible to be done by the parents. Take our dances for example. It started generations ago when the rock 'n' roll bop came out. It was the latest thing, and everybody learned to do it. It was great until parents started catching on to it. The very same thing happened to the twist. Since the dances keep on getting a little bit more daring every day, I haven't seen many parents brave enough to try the latest dances.

You hear teenagers say we want to be different, as if they mean their friends, when actually they mean grownups in general or parents. You don't see many mothers with miniskirts on, or fathers with Beatle haircuts and wearing hip huggers. It has become a habit with most teenagers to never stay at home, because they would rather be out with friends. They think they can't have any fun at home, because there is much more fun out with friends. However, they don't realize that there seems to be much fun out with friends, because almost all teenagers are alike; but really they are trying to be different from parents.

I believe if we tried being a little more like our parents we wouldn't have as much fun as we do with friends, but we could make our family life a better one and have a more peaceful and understanding home.

This is as much as I dare say, because no matter how hard you try I think you'll find it impossible to explain one generation to another.

Bob Wood
Milan, Tennessee

Reader Quotes About Parents

Second Place Winner—"Most parents love their teenagers, but I don't think they enjoy them. . . . If parents did enjoy teenagers, they'd go to them more often, talk to them, and help them through the rough spots of life. . . . One example of teenagers today is those who have long hair, smoke, cuss, drink, and do everything they can to stop the Vietnam war. . . . They don't think of what's happening to the country and the boys over there. They don't care enough for our country to fight for it. Girls' parents shouldn't let them go out with boys like that. That's how much parents today enjoy teenagers." —*Roger Willmore, Arab, Alabama.*

Other Quotes

"I think parents are pretty lenient. They know what is best for me to do or not to do. . . . I don't have too many privileges, but those I have I appreciate."—*Wilburn Barnett, St. James, Missouri.*

(Continued on Page 48)

Should I Attend College Before Farming?

By John Gerstner

FUTURE FARMERS are faced with a decision that was seldom considered a generation ago: Do I need a college education to farm?

The "farmer to college" bandwagon has arrived nationally, but it still is accompanied by dismayed glances from those who traditionally assumed that anyone could farm.

Impressionable farm youth are uneasy and understandably so. The mass media, his teachers, and others continually propagandize the benefits of higher education. The monetary benefits of a college degree are even spelled out in dollars—thousands of dollars.

But do these benefits apply to the farmer, the young man asks? "Can I afford to forestall four productive years of farming to attend college?" Educational deans in the College of Agriculture at Kansas State University say yes, unhesitantly. College educated farmers agree unanimously.

"I think my college education has made me an above average farmer where I would have been just average," Walt Rudolph, Manhattan farmer and 1960 agricultural graduate, said. "I wouldn't trade my college education for anything."

Harry Hartner, 1963 agricultural graduate and Manhattan farmer, said it would be hard to put a dollar value on his college education, but he would make the same decision if he had it to do over again.

Kenneth Parker, Manhattan farmer and 1960 agricultural graduate, also has no regrets about his college education. "Considering personal and financial enrichment, I don't think my college education cost me anything," he retorts.

How does a college education help the farmer?

All three farmers credited their education with helping them in making key management decisions. Here is a typical answer:

"I know many farmers who use plenty of fertilizer, pesticides, and herbicides and raise high yielding crops. But they lose much of their profit in poor marketing decisions."

"College broadens the individual and opens his eyes to new ideas and concepts," Parker said as he continued his argument for farmers' education. "I had the concepts of dozens of agricultural scientists presented to me at college so that new ideas in farming now seem almost commonplace," he disclosed.

"I'm not saying you can't be a successful farmer without a college education, because I know many good farmers who don't have a degree. But I do know that a college education makes it a lot easier to understand why and how a farming innovation can be made profitable. As a result, I am more prone to adopt the practice," Parker said.

"You'd better call the vet. That's a pretty sick cow."

All three farmers enumerated personal enrichment as another important benefit of college.

Glenn H. Beck, vice president for agriculture at Kansas State University, points out that farming's increasing complexity means Future Farmers will need increasing education. "Tested will be their ability to understand and use new farm technology and farm credit; and to manage a large, complex farm operation," he said.

"Farmers and ranchers now operate on such small margins that they have to produce more of each unit to have enough profits for satisfactory living standards. Bigger farms often represent an investment of $100,000 or more. Even more than other businesses, farms and ranches now require top management, the application of science, and the ability to predict future trends. Such abilities are improved by training beyond high school," Beck said.

But, as in all debates, the other side has its merits too. The camp who asks "Who needs a college education to farm?" quickly point to thousands of farmers who are succeeding without college educations.

Studies also have shown that usually the most ambitious youth go to college and that they probably would succeed without formal college training. Many present farmers say they keep ahead of research by reading farm magazines, visiting with the experts, and attending informational meetings.

Frank Carpenter, assistant dean of agriculture at Kansas State University, agrees college is not for everyone. "College for the 'all-set-to-farm' youth depends on the individual, his interests, motivation, and opportunities," he said.

"If the youth has enough resources in available rentable land, financial aid, and advice from his father or other relative and wants to 'get with it' in farming, it might be best if he began farming immediately," Carpenter said. "That's assuming that his presence in college would be considered by him to be an interruption of his most important goal—to farm. But that ignores the fact that more of college prepares one to live than to make a living," he declares.

The puzzle is puzzling. Farm youth will continue to pause at the crossroads between college and the farm. However, each year a larger percentage will take the college detour to prepare themselves for agriculture's most challenging profession—farming.

The U.S. Census says Marshall Morgan left the farm... we say he didn't.

We are not trying to start an argument with the U.S. Census Office.

Marshall Morgan is Cyanamid's Farm Products Planning Manager. And the Census people are essentially right in classifying him as a business executive.

But Marshall never left agriculture and—in more than one sense—he really never left the farm.

His headquarters are located at our square-mile Agricultural Center at Princeton, N.J.; one of the world's largest private facilities dedicated to agricultural research.

When he is not busy in the office, Marshall is working where the action is; out in the heartlands of American farming.

Back in hometown Seneca, South Carolina they remember him as an enthusiastic officer of his local FFA chapter. At Clemson University, where he earned his B.S. in Agricultural Economics, he continued to eat, sleep and think Agriculture.

He still does.

Men such as Marshall Morgan—raised on farms and educated in agriculture—have been the key to our sixty years of service to modern farming. Their special abilities help Cyanamid develop, produce and deliver reliable products to increase farm productivity and profits; products such as Aureomycin®—Aureo S·P® 250—Malathion—Cygon®—Thimet®—Sulmet®—Cyprex®—and a host of others.

If you would like to know more about Cyanamid in agriculture, write a postcard or letter to Marshall Morgan, c/o Cyanamid, Princeton, New Jersey. He will be glad to send you a reply.

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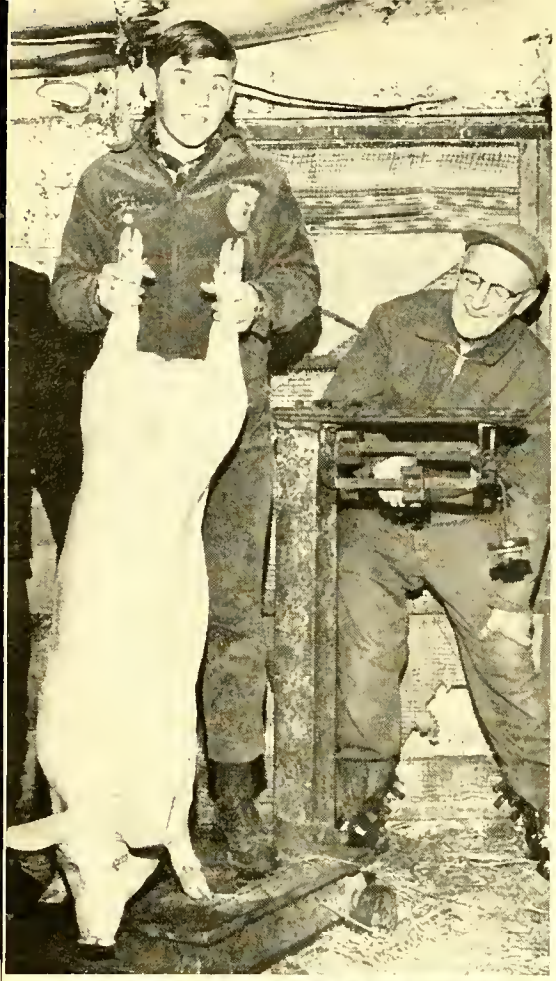
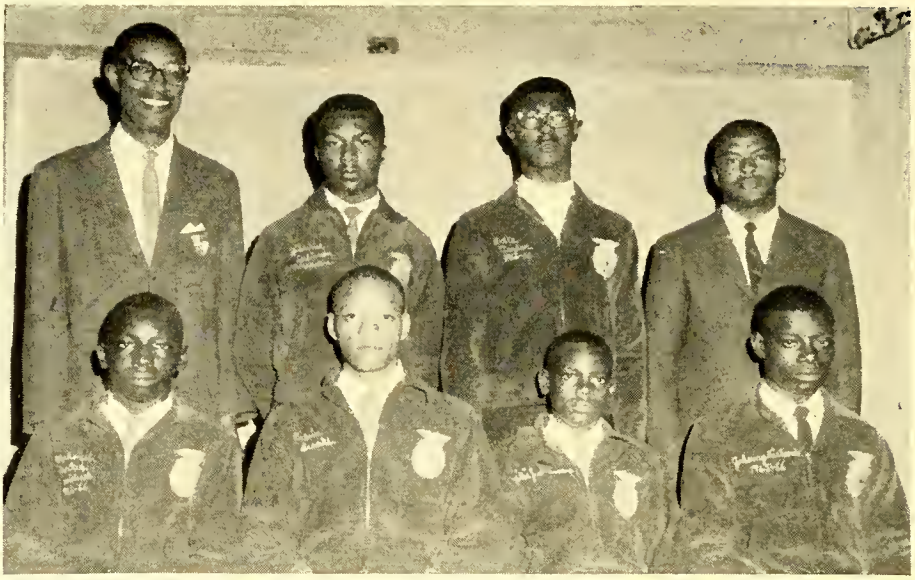
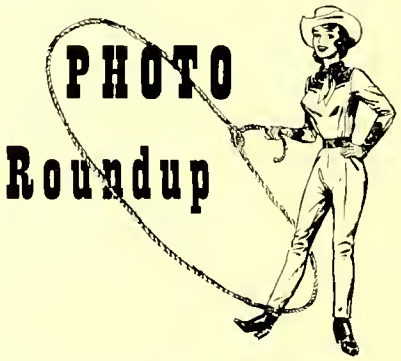




Officers of Eva Gordon Chapter, Magnolia, Mississippi, represent 204 members and the largest chapter in the state. Shown from left, front: Alphonse Carter, Dennis Hodges, Willie Simmons, Sam Brumfield. Shown in the back row are A. M. Coney, advisor, Frederick Robinson, Jerry Hurst, and Obediah Andrews, advisor.

Redwood Falls Chapter chose this gilt as "pig of the week" for their program to promote Minnesota State Pork Week. She gained 2.2 pounds per day.

Texas FFA sweetheart, Susie Flahaven, and Spring Branch Chapter sweetheart, Susi Larson, gave trophies to winners in Charolais classes at Houston show.



Tom Kuzemchak of Clymer, Pennsylvania, is joined by his advisor to show off Tom's Hampshire lamb that copped the market class at the county fair.

California president, Paul Kresge, and reporter, Bob Spiller, posed for some pictures with state and national FHA officers at the state FHA convention.

Mississippi Future Farmer, Edward Earl McCaughn, produced 255 bushels of corn per acre and was named high individual in the 304 Bushel Challenge.

Not a fly-fighter in sight... thanks to Rid-Ezy

Grazing drops off when cattle bunch up in brush or shade to fight pesky, bloodsucking horn flies.

So gains suffer. And cows produce less milk for calves.

The easy, convenient way to spread 'em out for greater gains is by self-feeding MoorMan's Rid-Ezy® Medicated.

Rid-Ezy is a combination of balanced minerals—plus the systemic insecticide ronnel. Summer-long self-feeding to beef cattle or dairy heifers on grass cuts horn fly numbers down to no-problem size.

Tests show contented cattle fed Rid-Ezy gain an extra $\frac{1}{4}$ to $\frac{3}{4}$ lb per head daily.

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Mr. Dairy-Businessman

Dairy-businessman James Salesman has overcome the problems of urbanization and long hard hours to become Star Dairy Farmer of America.

FFA'S STAR DAIRY Farmer, James Salesman of Argyle, Wisconsin, is a shining example of the kind of young man who can lead the long-hour, cost-price squeezed, dairy industry to a new way of thinking. His award, made at the National Dairy Cattle Congress, reads Star Dairy Farmer, but one quickly learns that it was as a dairy-businessman that he won.

Only 19, young Salesman has already seen his home dairy operation moved to escape urbanization. He explains, "Prior to moving to Green County, we farmed for ten years in northeast Illinois. During those years, we developed a herd of all registered Holsteins by replacing grades with better purebreds. With increasing cash rent costs caused by rapid urbanization of our area, we decided that to stay in business we should purchase land to the south and west of metropolitan Chicago. By moving those 120 miles from Grayslake, we have escaped city expansion and are still in easy access to the city; we can specialize in the thing we all like to do best . . . dairying."

Perhaps because of this experience, which occurred the same year James entered high school, his every move has been marked by the same sense of good business timing.

How did it all start? James says, "My first registered Holstein was obtained through an agreement with my father. He gave me the animal in return for her first heifer calf and my labor at home. During her eight years, she had only one female offspring, but she did provide enough funds from the sale of milk to purchase additional cattle. By these means, I had four animals valued at $1,800 before enrolling in vocational agriculture in 1961."

James has used this foundation to expand his farming program to 18 head of registered Holsteins. Using his dairy profits, he has also purchased a 10 percent interest in the farm's 28 sow-farrowing setup and has rented additional cropland. All cropland is rented at $20.00 per acre. James' dairy profits are figured on the basis of the milk income records of the cows he owns, from which feed costs are deducted.

As businessmen, both James and his father made the best possible use of their new farm. As James made explicit, "This region of Wisconsin is very rolling land that requires strict use of good conservation practices to maintain peak production. We have a hardworking herd of registered Holsteins numbering just over 100 head. Our 50 milk cows are fed in dry lots as well as pastured during the summer for a year-round haylage supply. During the winter months, their roughage sources include well-cured alfalfa hay, corn silage, and alfalfa haylage. We try to lead feed all cows with a homegrown ration of corn, oats, soybean oil, meal, and commercial premix. So far our efforts have paid off."

Just how well it has paid off is clearly shown by James' business records. In 1962 the cows owned by James had a yearly average milk production per cow of 12,077 pounds of milk and 440 pounds of fat. By 1966 this record had jumped to 14,568 pounds of milk and 521 pounds of fat. These Dairy Herd Improvement Association records are based on a 305-day mature equivalent basis. It is also clear that this record can be expected to climb further. Declares James, "My cows are for the most part young and have not reached their mature productive capability."

Salesman's other records are just as impressive. At the present time, he has four head that are officially classified as Very Good with an average classi-

James is pictured in his 50-stall dairy barn that is tapered in length to fit each cow.

fication score of 87, one Good Plus with a classification of 80, and one with a classification of 78 which is Good. In 1965 the herd's breed classification program showed a breed age average score of 100.8.

Points out James, "We have 53 daughter-dam comparisons that we can make in our herd. This shows the productive power of our breeding herd." They have four sires that they are using in an artificial breeding program. In addition, they have two sires of their own. For example, six records of the dam of their herd sire, Salesman Duke Majesty 1408166, shows an average of 21,112.83 pounds of milk produced and 776.66 pounds of fat.

The value of young Salesman's business records are revealed further by the dollar increase of dairy products sold since James started his dairy enterprise. During his freshman year in vocational agriculture, he sold whole milk valued at $268. By his senior year, he was selling nearly $3,000 worth of milk.

James is now a Freshman at Wisconsin State University. "Every weekend, though, you'll find me just 50 miles east of there at my farm home," asserts Salesman. "My brother John, who is a high school freshman and FFA member, and my sister Linda help make it possible for me to be away at school. We have tried to mechanize our farm enough to take the rough labor and long hours out of dairying," concludes James.

As a matter of fact, James has had a lot to do with the farm's improved mechanization. Among the farm improvements he has helped to plan and construct have been an oxygen-free silo, a remodeled dairy barn, bunk feeding system, and a central-pole-metering electrical system.

Away from the farm, James has set an outstanding record showing his cattle. In 1964, he showed the reserve champion female at the Wisconsin Black and White Show, and in 1965 he was champion showman over-all breeds at the Wisconsin Junior State Fair.

An honor graduate of Monroe High School, he has built an outstanding FFA record under the direction of FFA Advisor Mr. Kenneth Allen. He served as a chapter vice president, was a state officer, and won trips to the National FFA Convention and the American Institute of Cooperation.

Looking to the future, James says, "I plan to finish school and go into partnership with my father. I feel that the successful farmer of tomorrow will need all the education he can get in order to stay abreast of the changing agricultural business."

Driving in Another World

(*Continued from Page 23*)

never take off in their cars immediately after leaving a brightly-lit room."

Many teenagers wear sunglasses when driving at night, claiming that they cut down on glare. Gesteland commented, "Although I realize they're 'cool,' sunglasses should never be worn while driving at night. 'Shades' can cut your ability to see by as much as 50 percent, as can tinted windshields (although to a lesser extent than sunglasses)."

Gesteland says that drivers are easily trapped by road conditions at night unless they are made aware of them in advance. "You can avoid being blinded by the lights of an approaching car by watching the right edge of the road. Look for clues that only night driving offers," he said. "Such clues are reflections on roadside wires and 'halos' produced by the headlights of a car approaching from over a hill or around a blind curve.

Gesteland considers the basic difference between rural and urban driving to be the higher speeds and darker roads in the country and the fact that a stopped or slow-moving vehicle can be encountered at any time. "The 'closing' speed on a slow-moving vehicle, such as a piece of farm equipment, is much faster in the country," he said. He favors the adoption of universal slow-moving-vehicle insignia.

One dangerous operation a driver may be called upon to perform at night is changing a tire. Here is the procedure to follow when changing a tire at night: Find a safe area and pull completely off the road, even if the tire is ruined in doing so. Place a flare 200 to 300 feet to the rear of the car and one about 100 feet in front. (Three flares should always be carried in the car; one to use as a spare.) Turn on the car's flashers and the inside dome light; all other lights should be turned off. Place a wheel block (a wood block, a rock, etc.) at the wheel opposite the one you're changing. While changing the tire always keep on the lookout for approaching traffic.

Another situation you may encounter is meeting a "one-eye" at night. When you see only one headlight approaching, pull as far to the right as possible and slow down. Gesteland says, "You can't tell what lane the other car is in, or even if it is a car.

"Know how to operate your car's switches and controls blindfolded," Gesteland said, "because that, in effect, is the situation when driving after dark."

A recommended emergency safety kit is composed of five "F's": flares (three), first-aid kit, fire extinguisher, flashlight, and flags.

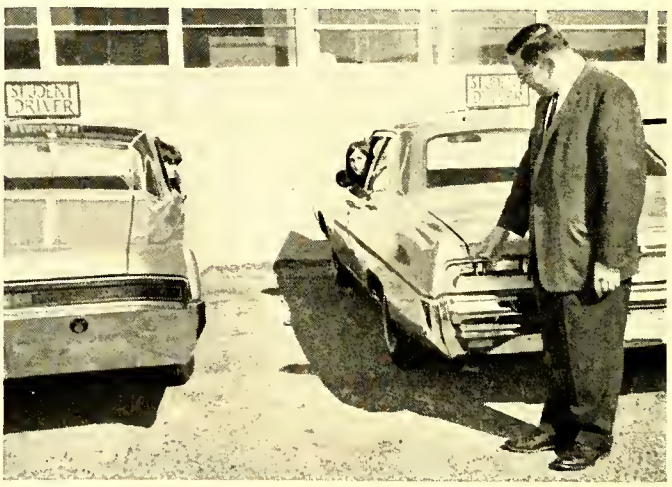
Wisconsin recently joined a current total of 30 states that have adopted reflectorized "safety" license plates. "Although we've had only five months' experience with them," Gesteland said, "we (the Janesville High School driving instructors) think they've definitely reduced night accidents in the rural areas of Wisconsin.

"You should recognize the importance of signs to highway safety, particularly in rural areas, because the problem of sign vandalism and theft as a 'prank' is a growing one. One bullet hole can ruin a metal sign in a matter of weeks."

Willard Schmidt, highway commissioner of Wisconsin's Rock County, concurred with Gesteland's comments: "Missing or disfigured highway signs can cause bad accidents. We would appreciate calls from drivers who notice signs that have been hit, vandalized, or stolen."

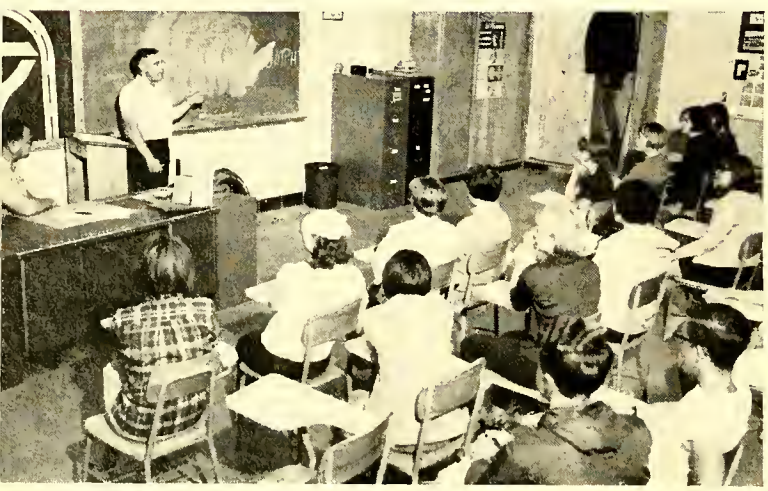
Gesteland's night driving suggestions may save your life! He cited statistics showing that more than half of the nation's rural accidents occur at night. "There's only half as much traffic at night though," he said, "and that means the night situation is more than twice as serious as the day."

A word to the wise is sufficient!



Make sure your car is in working order before each road session, including checking all your car's lights.

Classroom instruction provides night driving know-how. Eight hours of on-the-road instruction is also given.



Students should learn the location and function of all instruments, since they won't be visible after dark.

HERE THEY ARE

Your Name and Message Here
Will Win Friends for You
All Next Year
MARCH 1968
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10 11 12 13 14 15 16
17 18 19 20 21 22 23
24 31 25 26 27 28 29 30

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Folded 14" x 10½"—Opens to 14" x 21"
Beautiful FFA Painting in Full Color

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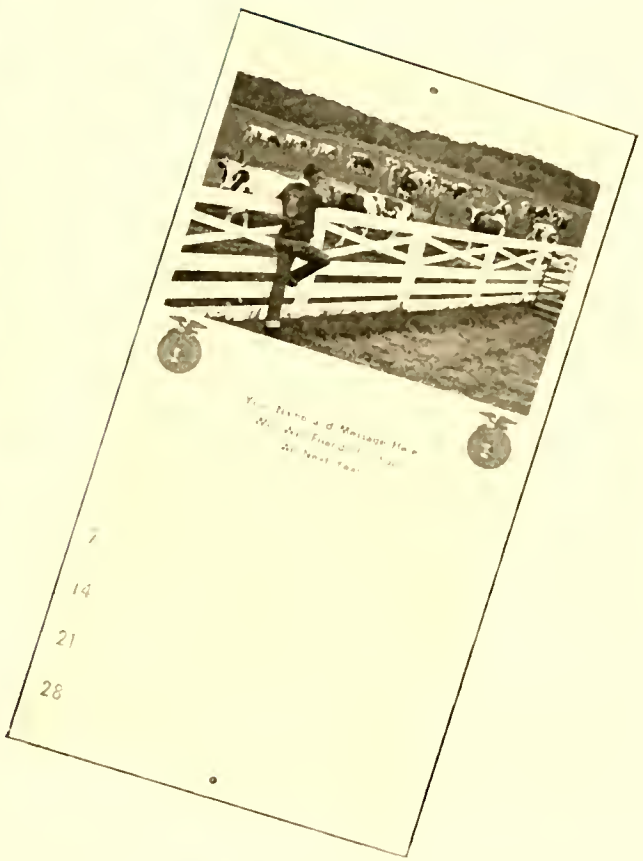

THE HOME & OFFICE CALENDAR

12 Full-Color FFA Photographs
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It is best to employ a net when you are boating a crappie. They have a thin mouth, and the hook may easily tear free.

Crappies roam in schools. Once you have discovered where they are located, you will no doubt take several of them.

CRAPPIES—

"plain fun to catch!"

By Russell Tinsley

THE CRAPPIE isn't a flashy fighter. In fact, you could almost describe it as dull, battling deep in tight figure eights rather than coming up to jump. It doesn't grow very large, anything bigger than two pounds is a whopper. Only rarely can any number of them be taken on artificial lures. Yet, despite this, the crappie is one of our most popular game fish.

An old-timer I once knew, a dyed-in-the-wool crappie fisherman, perhaps summed it up best: "Crappies are just plain fun to catch."

The crappie is widespread, literally the length and width of the United States. It roams in schools, and when you catch one you likely will take several; it cooperates throughout all seasons; and it is delicious to eat. All this, plus being "just plain fun to catch," ought to answer any question as to its popularity.

Crappies are hungry most all the time. They're caught in the hottest part of the summer, in spring and fall, day and night, and in winter they're caught through the ice. Some of the best catches are made in the spring when the crappies migrate into the shoreline shallows to scoop out nests and spawn. This is one time of year when they'll readily hit an artificial bait retrieved very, very slowly. One of the best lures is a tiny leadhead jig, white colored.

Yet this spring flurry in shallow water is a brief thing. During 99 percent of the year, most crappies are caught in deep water on natural baits, with the ordinary minnow being the favorite.

Most natural and man-made lakes have crappies, as do some rivers that have deep, still pools. This adaptable fish is very prolific. The more you catch the better it is. Crappies reproduce so rapidly there are often too many for available food, and the end result is a population of stunted fishes.

Crappies prefer to linger around some underwater obstruction: a sunken tree, a large boulder, or a clump of brush. Some fishermen create their own personal crappie-fishing hotspots by cutting brush, tying it together and anchoring it in deep water. The depth where you'll find crappies varies from lake to lake, but they generally prefer water more than ten feet deep if it is available. It isn't unusual to catch them in depths of up to 40 or more feet in deep man-made impoundments.

More than half the battle is won once you locate the fish. Usually they'll bite if you just can pinpoint their whereabouts. When crappies are in a cooperative mood, they normally bite in a hurry. Never spend more than 15 to 20 minutes in one spot. Drop your live minnow right to bottom, then take a turn on the reel handle. Leave the minnow for about five minutes and if in this time you haven't had a nibble, take a couple more turns on the handle again and pause for a few minutes. After this, come up a few more feet, fishing each layer of water from the bottom to near the top. Move frequently, prospecting around underwater obstructions, and likely you'll find a concentration of fish sometime during the day.

A helpful aid is a commercial crappie rig, available at most any sporting goods store for a nominal price. This rig has a couple of twisted-wire "arms" which extend out

(*Continued on Page 58*)

You'd never mistake Winchester's Model 190 automatic for anything but a real, honest-to-goodness rifle.

The gracefully contoured stock and forearm are good solid wood.

The barrel is steel.

The sights are metal. And it'd take a hammer to knock them out of line.

And the receiver's made of a new rugged, rustproof metal alloy.

The point is, Winchester still believes 22's are real rifles.

The 190 is made with the same honest metal-to-wood workmanship that has always put Winchesters in a class all by themselves.

So when you take it out in the field you can be darn sure it'll work. And shoot where you point it. And keep on doing it. (The 190, by the way, can handle 21 Short, 17 Long, or 15 Long Rifle cartridges interchangeably.)

Of course, this new rifle doesn't have some of the fancy frills you get in Winchester's more expensive 22's.

Like checkering and Monte Carlo stocks, engine-turned bolts, et cetera.

But then it doesn't have the fancy price tag either.

How fast can you save up $43.95?

If you're saving up for a Winchester 22, now it won't take so long.

WINCHESTER®

Readers Speak Out!

(Continued from Page 37)

"If parents didn't care, they would not sponsor so many functions where teens are involved."—*Dennie Harms, Springtown, Texas.*

"Over-all the parents don't enjoy their teenagers, but I think they love them very much."—*Billy Briscoe, Eagle Lake, Texas.*

"Parents enjoy and are proud of their teenagers, and in return they want their teenagers to be proud of them."—*Glenn McCraw, Ada, Oklahoma.*

"If we try to be helpful to our parents, they would seem more interested in our affairs. . . . Parents like to see teenagers succeed. Teenage is the time we need adult help."—*Richard Simon, Franklin, Indiana.*

"By the time a child reaches the teenage years, the habit of protection is in strong effect, and it is not easy for parents to begin to let their children make decisions of their own."—*Dennis Pitts, Fitzgerald, Georgia.*

"Parents have watched them grow from helpless adolescence to young adults who are able to start thinking for themselves."—*Steve Hoefing, Manson, Iowa.*

"Yes, parents enjoy teenagers. . . . The main basis of this enjoyment is love."—*Jack Thompson, Blossom, Texas.*

"One way a teenager can make his parents enjoy him more is by doing things that will make them proud of him."—*Michael Mayton, Taylor, Arkansas.*

"If a parent is disappointed in his son or daughter, he is really disappointed in himself for not being a good parent."—*Shelby Huff, Oak Grove, Louisiana.*

"In fact, teenagers make up the majority of the U.S. population. Most parents love their children but do not take time to teach them the difference between right and wrong. A person that doesn't take time out with a teenager doesn't have time to enjoy him."—*William Miller, Kemp, Texas.*

"Parents may more or less compare us with books. Whether it's a novel or a joke book, there's always a certain something that reminds them of the historical things they did. We're sort of an influential subject for them to study."—*Janice Smith, Warsaw, North Carolina.*

Reader Quotes About Society

Second prize winner—"The value of our society places a lot of pressure on teenagers. He wants to drive fast, go more places, keep in step with the rest of the guys. This makes parent relationships more difficult. . . . This is where the parent has a hard time explaining why they say no, and it is not always an easy chore. Teenagers should take this into consideration; and, if they do, it makes parent relationships more pleasant."—*Gene Warren, Arcata, California.*

Other Quotes

"Society places far too little value on youth. Youth are constantly being belittled by members of society. I sometimes feel that members of society belittle the youth only because they are jealous."—*Ralph Cooke, Smiths Grove, Kentucky.*

"The general purpose of life is to test our ability to cope with problems in life. . . . I've gained a bigger sense of responsibility in the FFA. Society makes it rough on kids to get along with parents."—*Richard Howard, La Verkin, Utah.*

"Adults today try to judge their children by the actions of other teenagers. . . . Parents that know how to control their teenagers will bring out the good in the youth, and the wrong will eventually become so small that the society will be more understanding toward the youth. . . . You can't always blame the parents, because the youth are sometimes uncontrollable."—*Larry Young, Ada, Oklahoma.*

"In our generation, society is that of noise, confusion, protesting, and a lack of time for the necessary things in life. . . . I believe that both our society and our parents place a great value and training on our youth today. . . . Banks are giving loans to people wanting college degrees; scholarship funds are offered at state and private colleges. These funds are made possible through our speedy and confusing society."—*Doak Doolittle, Story City, Iowa.*

Take Care of

YOUR GUN

GET A NEW GUN recently? If you did, then you'll want to take care of it. With proper care, it will last several generations.

When transporting your gun, you'll not only want to protect it, but carry it safely as well. So carry it in a case. This will keep away inquiring hands and prevent the fine stock from being scratched. And, of course, you will want to carry it unloaded and uncocked. If possible, take the bolt out and carry it separately.

We take pride in ownership of a fine hunting rifle or shotgun. It should be displayed to the best advantage. An attractive gun rack will lend to the rifle's appearance and, when equipped with a lock, will keep the gun safe.

Before storing your gun, clean it thoroughly. Use a good solvent in the bore until the patch comes out clean. Then dry thoroughly and put on a light film of oil. Too much oil can be as dangerous as an obstruction in the bore. Excessive oil or grease in the chamber or bore can create pressures greater than the safe maximum. Clean all metal parts and wipe on a light film of oil. Stock waxes and preservatives are commercially available to keep the wood in good condition.

When cleaning your gun, be by yourself. The only time you need ammunition is in the hunting field or on the range, so leave ammunition locked away separately from the firearms. Check for mechanical defects and always make sure the bore is clear before using the gun. Now that the gun is clean, lock it in the rack.

Friends will probably want to see your guns when they come to call. Naturally you want to show off your new pride and joy. The first thing to do is open the action and make sure there are no cartridges in the chamber or magazine. An open action is the most dependable safety precaution, because the firing pin cannot reach the cartridge. Safeties are mechanical and, thus, subject to malfunction. Use them only as a supplement to good gun handling.

Even with the open action, or if it must be closed to get the right "feel," *point the muzzle in a safe direction.*

An expert is easily recognized by the way he handles a firearm. He never allows it to point at anything he does not intend to shoot.

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THESE materials are free! You can get a *single* copy of any or all of them by mailing the coupon below. Just circle the items you want and send your *complete* address.

32—Chain Saw Operation—A new pocket-size booklet on the proper, efficient, and safe use of power chain saws. Prepared for the inexperienced chain saw user and new owner, the illustrated chain saw "primer" will also interest professional operators. Covers such subjects as starting the engine, felling, limbing and pruning, bucking, clothing, and care of equipment. Of special interest is a glossary of logging terms. (McCulloch Corporation)

33—Dimensions Of Veterinary Medicine—This illustrated booklet describes in detail the various activities of modern veterinary medicine and the scope of veterinary medical education. You will find a valuable list of colleges of veterinary medicine and a sample curriculum of a U.S. veterinary college. (American Veterinary Medical Association)

34—How To Plan Your Water System—This colorful booklet describes and illustrates underground strata and water-bearing formations which influence the location of the well to insure a safe, pure water supply for the farm or household. It also discusses different types of wells; tells how to choose a reputable well contractor, and what to expect from him. (Fairbanks Morse)

35—Down The Road Together—If there is a chance you'll need to write a school paper on farm credit or agriculture, this booklet is worth having around. It describes the growth of the Federal Land Bank farm credit system and contains a history of American agriculture. (Farm Credit Administration)

32 33 34 35

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authentic western pants and jackets worn by working cowboys.

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The author, W. T. Johnson, far right, has worked with rural youth for many years. He tells them you must be prepared for your future in agriculture.

You must prepare for

Your Future in Agriculture

By W. T. Johnson

FOR TOO LONG, the general public has looked upon agriculture as the production of crops, livestock, and fiber. But rural youth needs to become aware of the total agriculture program. He needs to know about, and needs to be trained for, the many positions that are available to rural youth. There is a great need for trained individuals with farm experience to organize and manage many farm-related businesses. Then there is also the highly complex food production, conservation, and distribution system that is currently calling for expansion.

City youth might train for such jobs. However, it appears that rural youth who know something about farm production would make a greater contribution. Since trained rural youth will fill the vacancies for on-farm jobs of production, other rural youth should be trained for positions in the related farm occupations.

Once all rural youth were employed on the farm. This work gave them basic training that they were able to use even on off-farm jobs. That opportunity no longer exists. Most of the jobs once done on the farm by youth are being done by improved technology. This is good, but rural youth must be prepared to compete with city youth for the non-agriculture jobs. Rural youth will want to take advantage of any experiences they can in preparation to face the world of work.

Competition today is mostly between people and ideas—rather than between products. Rural youth should consider college or any other preparation that will help them get ready for leadership (technical and social) and for business-related positions that are rapidly emerging in many agriculture-related occupations.

Many of the positions are practical. Consequently, individuals with agriculture backgrounds may serve best in them. The training on all levels will demand youth to do their best and present fresh ideas. You can surely realize that successful business organizations of tomorrow will be the ones with the best trained people running them—people with imagination, courage, and a willingness to change to meet the new conditions.

"Here's the fellow I'd put my money on!"

Vocational education in agriculture consists of instruction and training experience which prepares students for employment and advancement in agriculture. The instruction is intended to develop knowledge, skills, and attitudes which provide preparation and education for gainful employment, or to serve as a foundation for those students seeking higher education in agriculture. The program of training and education is based on the occupational goals of the students and the requirements of the agricultural occupations and employment opportunities.

The FFA is designed to give training and inspiration. FFA chapters are a vital part of vocational agriculture education provided in rural and consolidated high schools. As an FFA member, you should strive to glean all you can from this program. A balanced program will help you adjust to whatever community you decide to live in—rural or urban. Participate all you can in order to be ready for the future.

PTO provides an extra engine

(Continued from Page 22)

may have difficulty sliding the implement coupler over the tractor pto shaft. A few minutes spent in wire brushing and oiling the tractor shaft makes the job less difficult.

You can easily position grease fittings in moving parts of your combine, baler, or chopper by the following method. Instead of attempting to stop the pto at just the right time by means of the clutch, try this: Engage the pto clutch while the tractor ignition switch is "off" and turn the pto slowly with the tractor starter.

Your pto clutch should be engaged gradually, the same as the forward-motion clutch. An early tractor or machine breakdown results from snapping a pto clutch into engagement.

If a drawn machine becomes clogged by a "slug" of material, the slip clutch should "open." However, after stopping, clean out the machine before attempting to start it again with the pto clutch. You may be able to force a "slug" on through, but you will have a burned-out pto clutch if you continue the practice.

If your tractor has a pto clutch controlled by a separate lever or pedal that is truly independent of the forward-motion clutch, you can use it to an advantage when turning sharply. At the end of the field, allow the machine to empty and then disengage the pto clutch. You can prevent undue wear on the universal joints and turn more sharply. Be sure the machine is again up to speed before placing a load on it. This is possible, without disengaging the forward-motion clutch, with an independent pto clutch.

Some implements which mount on the three-point hitch also use a pto hookup. Proper installation is essential for correct telescoping action when you raise and lower the hitch. Check also for proper installation of safety shields. In most cases, some sort of brace is needed to prevent side-to-side movement of the hitch, which adds an extra load on the pto drive.

Certain stationary machines, such as corn shellers and forage blowers, are available with a pto drive instead of the conventional belt pulley. Thus, it is not necessary to get "lined-up" as was required with a flat drive belt. However, the driven machine should be set parallel to the tractor rear wheels, even though it need not be in line.

"I hope she's not ticklish!"

THE ROLE OF NORTH AMERICA'S GRAIN FARMERS IN HELPING TO FEED A HUNGRY WORLD...

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Lennie H. Gamage, program coordinator, spoke to the group in German.

More than 80 members of the Confederation of German Farm Youth were guests of the National FFA Organization. Here they tour nearby Mount Vernon.

German Young Farmers Meet with FFA

Dr. Woelke, agricultural secretary of German Embassy, brought greetings.

C. T. Smith, Virginia, FFA Chapter conducted FFA opening ceremonies.

AS A PART of the growing involvement in international activities by the FFA organization, more than 80 members of the Confederation of German Farm Youth were guests of the FFA at the National FFA Center on April 26. The touring young farmers also visited the Wooster, Ohio, FFA Chapter on April 28.

A formal program took place at the FFA Center including an evening banquet. Lennie H. Gamage, who visited Germany last year to coordinate FFA's international activities served as program coordinator for the event.

The Confederation of German Farm Youth is a voluntary self-supporting club within the German Farm Association for Farm Clubs and Farm Groups. It includes 13 Land Youth Farm Associations and 4,000 Farm Youth Groups. Membership of the organization is 132,000.

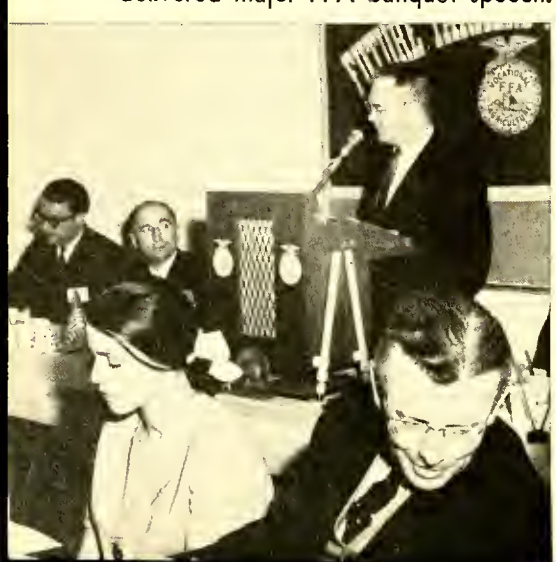
The FFA is exploring the possibility of an exchange on a regular basis with the Confederation.

A Virginia Future Farmer learns of German agriculture during banquet.

Paul Gray, FFA executive secretary, delivered major FFA banquet speech.

National President Gary Swan welcomed the German Young Farmers.

Mr. E. Schreiber, general secretary of the Young Farmers, thanked the FFA.



Future Farmers' BOOKSHELF

THESE new books and educational materials are reviewed as a reader service. If your local bookstore doesn't have them, write directly to the addresses given below and mention *The National FUTURE FARMER.*

The High School Student's Guide to Summer Jobs 1967 (Maco Publishing Company, Inc., 757 Third Avenue, New York, New York 10017, 95 cents, plus 5 cents handling)—This handy guide, which is available for 95 cents at newsstands, department stores, and book stores, advises teenagers on how to select a job and keep it. Guide also lists state and private employment agencies with suggestions on how they can be profitably used. It includes sample resumes and applications; lists of companies employing teenagers for summer jobs; and non-government and government job opportunities available across the nation.

Christmas Tree Farms (Agricultural Division, Allied Chemical Corporation, 40 Rector Street, New York, New York 10006, four-color paperback, $2.00)—This may be the wrong time to think about Christmas trees, but this 126-page guide is the first full-length book devoted entirely to the subject of successful Christmas tree cultivation and sales. The book's 12 chapters, prefaced by a short history of the Christmas tree, gives practical advice on every step required for profitable Christmas tree farming. A valuable guide for both inexperienced, small-scale growers and established operators.

Native Inheritance (Harper and Row, Publishers, Inc., 51 East 33rd Street, New York, New York 10016, $6.95)—Here is the natural history of corn traced for you from its early use in aboriginal cultures through its critical role in the survival of the Plymouth colony to the vast growing fields and complex starch-refining plants of the Middle West today. Written in a lively and easy-to-read manner, you discover how Americans have tended and developed corn to the point where everyone's daily life is affected by it.

1001 Fishing Tips and Tricks (Harper and Row, Publishers, Inc., 49 East 33rd Street, New York, New York 10016, $5.95)—This new book is something different. Actually contains 1,001 lesser-known tips and tricks collected by outdoor writer Vlad Evanoff to catch fresh and salt-water fish. The book covers tackle, lures, live baits, rigs, techniques, and methods with "how-to-do-it" drawings.

"One hundred and ten in our dairy herd—and no milk?"

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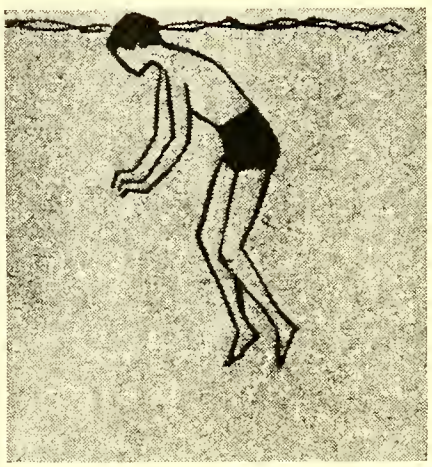
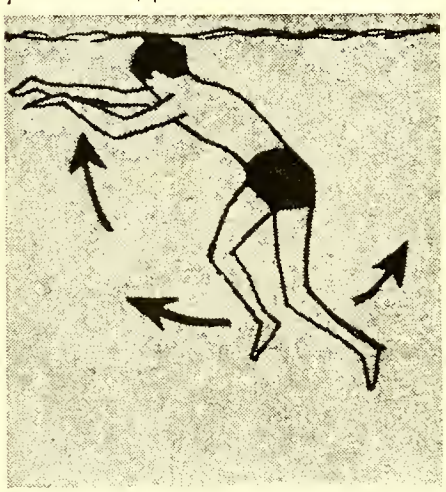
GATEWAY TO AND FROM THE AGRICULTURAL WEST

DROWNPROOFING CAN SAVE YOUR LIFE

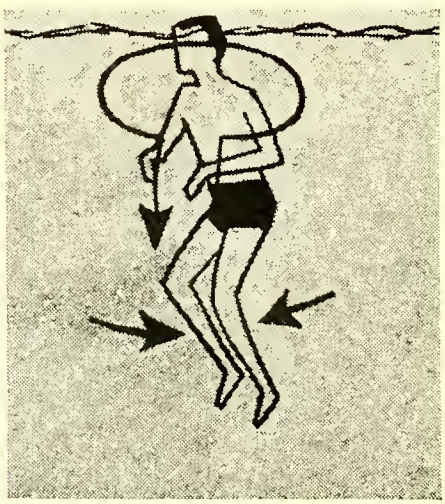


Take a deep breath and relax in the water.

Below: When you want a breath, not when you need one, put arms out and scissor kick.



Raise your head, push down with your hands in a keyhole pattern, and bring your feet together. Exhale through nose and surface.



INCREASING NUMBERS of Future Farmers will be finding cooling relief from the hot summer weather in farm ponds. But if they don't learn safety procedures and provide adequate water safety equipment for their ponds, they may also find tragedy. Note this fact: While there has been a steady decrease in farm pond drownings of children under five years of age, there has been a significant increase among those from 15-19 years of age.

Learn Drownproofing

Drownproofing is a method of floating that will keep you alive in the water if you can swim or not. Thousands have learned easily. It's fun to float effortlessly and with new confidence.

Drownproofing uses the natural buoyancy of the body and controlled breathing to make it possible for you to keep afloat for hours. You can learn to survive this way after just a little instruction and some practice.

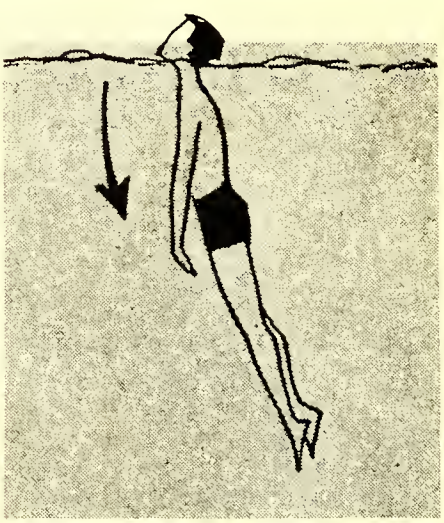
This method is not new. The late Fred LaNoue, head swimming coach at Georgia Tech, taught this technique during World War II. Passing this swimming program is a requirement for every Georgia Tech student. Since then drownproofing has been adopted by many colleges throughout the nation, the Peace Corps, the Marine Corps, and the Coast Guard. Many swimming teachers feel it should be the first thing taught to anyone learning to swim. You can learn too by following the diagrams accompanying this article.

Learn To Swim

Join an organized swimming class. Swimming programs are operated by the Red Cross, YMCA, schools and parks, and your FFA camps. If you can already swim, learn to swim better. Here are some basic rules for swimming safety. Don't swim if you are chilled, overheated, or overtired. Also, never swim alone or in a storm. Begin by choosing a safe place to swim and never dive into strange waters. Finally, know your ability and don't show off.

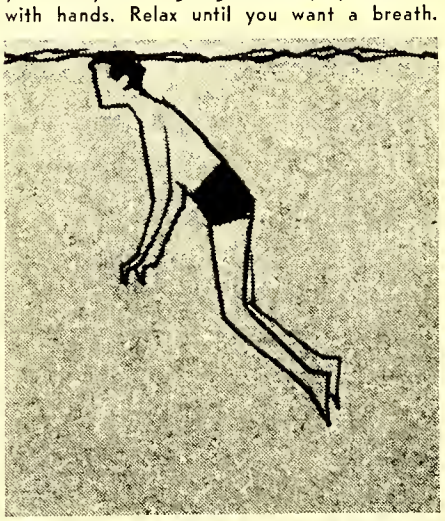
Learn Lifesaving Techniques

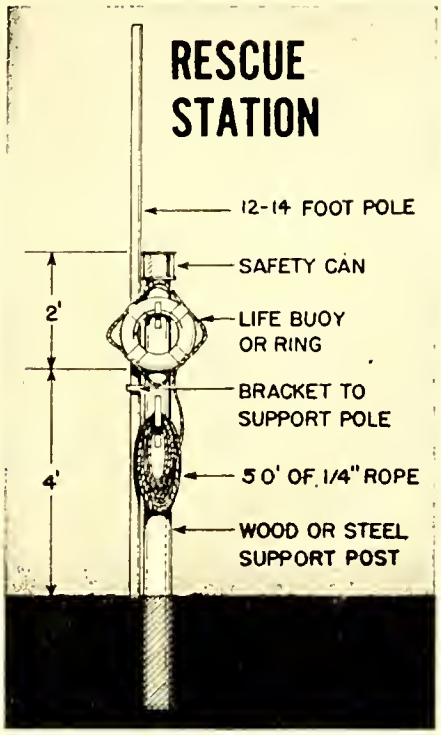
You can save a life even if you can't swim. The swimming area of your farm pond should be marked off with a rope stretched between wooden blocks. Danger spots, such as deep holes and submerged rocks or stumps, should be clearly marked.



When your chin is even with the surface of the water, open your eyes wide, open your mouth wide, and inhale through your mouth.

Relax and you will settle down again. If you feel you are going too deep, push down with hands. Relax until you want a breath.





Build a rescue station for your farm pond.

Reach out from shore and pull the victim slowly to safety. If he is farther away, use a life ring at the end of a rope. To develop some accuracy with the ring buoy, it's a good idea for the whole family to practice throwing it. Throw it beyond the victim and draw it to him so he can grasp it. A small inner tube may be used in place of the ring buoy, provided it is strictly designated as lifesaving equipment only and not for play use. If you are in a boat, row to the victim and extend an oar to him. Maneuver the boat so the victim can grasp the stern, then row to safety.

Learn mouth-to-mouth resuscitation; it saves lives. The Public Health Service has just prepared a wallet-size card on rescue breathing. Everyone who likes to swim or who has a farm pond should have one of these cards handy. Readers of *The National FUTURE FARMER* can receive up to six rescue-breathing wallet cards per family. For your *FREE* rescue card, write to Public Health Service, Department of Health, Education, and Welfare, Publications Inquiry Branch, Room 5312 South Building, Washington, D. C. 20201.

Build A Rescue Station

Build a rescue station for your farm pond. All that is required is an 8-foot post, a life preserver attached to 50 feet of rope, and a white rescue pole 12 to 14 feet long. For details see diagram.

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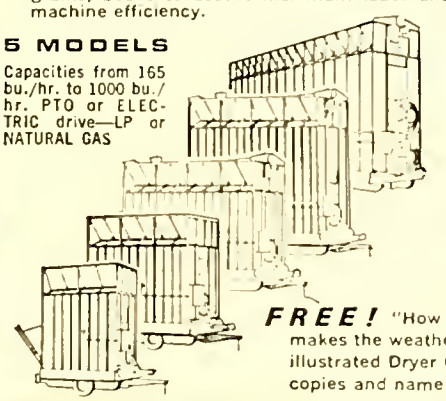

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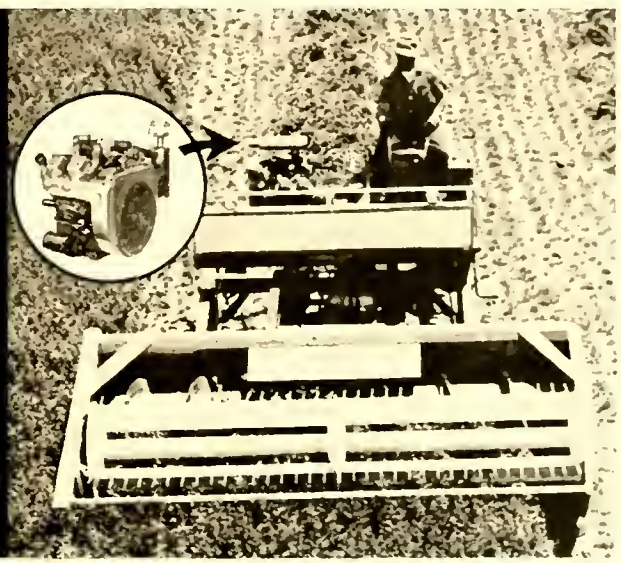

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F-843

THE FFA IN ACTION

West Virginia FFA vice presidents, Robert Moorefield and Michael Lemons, were samplers at the state show and sale.

WEST VIRGINIA—Future Farmers sold ham, bacon, and eggs recently for a total value of $5,289.61. Not bad when you can sell a dozen eggs for $75.00; and when you can get $30.00 per pound for a 19¾-pound ham. That makes it worth $592.50. Then selling bacon for $20.00 per pound isn't bad either.

These were some of the prices paid at the annual West Virginia State FFA Ham, Bacon, and Egg Show and Sale. Future Farmers from 25 counties participated and sold their prize-winning products.

Kevin Holliday showed the champion dozen eggs that went for $75.00 per dozen in the sale. Danny Ruckman got a total of $592.50 for a ham he entered in the show that was named grand champion ham. The grand champion bacon was entered by Charles Miller who sold it for $135.

Buyers at the sale were hotels, automotive dealers, restaurants, chain food stores, banks, the Chamber of Commerce, and individuals.

Future Farmers entered 138 hams, 83 bacons, and 62 dozen eggs in the show and sale. The $5,289.61 for the 1967 show brings the grand total to $101,971.26 for the 24 annual state sales.

IOWA—Two chapters made special efforts during National FFA Week this year to tell their school faculty more about the FFA and its program.

The Manchester FFA Chapter at West Delaware High School conducted a faculty coffee for the sixth year in a row. Since the vocational agriculture department is away from the rest of the school, the faculty members are invited to the agriculture building to see the classroom and the department's farm shop facilities.

The chapter serves faculty members coffee and rolls. Then they present a program beginning with a brief description of the importance of agriculture in the county. Then the chapter members report their chapter's activities such as those in the areas of supervised farming and community service. Advisor Garland Ashbacher states that last year an Iowa congressman attended the coffee.

In Waverly-Shell Rock High School, the FFA chapter feeds a big farm style breakfast to all of the school faculty, administrators, cooks, and custodians. This year, supervisors in the agricultural occupations and employment program were invited. State President Barrie Swinbank spoke at the breakfast this year. A former chapter member who is out of school is also invited each year to express thanks to the faculty from the FFA members.

Mr. Larry Trepp, chapter advisor, says that the breakfast does a great deal to tie together the vocational agriculture and academic areas of the high school.

Truman FFA used photos of projects in a pork week display at the local bank.

MINNESOTA—Several chapters have participated in a state-wide program to promote their State Pork Week. The Truman Chapter has 41 members who raise hogs. Since pork production is a vital part of their agricultural community, they placed an advertisement in their local newspaper to encourage people to eat more pork. They also set up a display in the local bank about some of their hog programs.

The New Ulm Chapter placed an article in their newspaper encouraging people to eat an extra pork chop to celebrate State Pork Week which was proclaimed by Minnesota's lieutenant governor.

Redwood Falls Chapter announced a special pork project they initiated during Pork Week. They set up a "programmed sequence" feeding diet for six pigs. They used a big picture which made the front page of their local paper to tell about this activity.

SOUTH DAKOTA—Members of the Philip FFA Chapter have added two new awards to their program. Each month they select a member as Student of the Month and a member as Safe Driver of the Month.

Their student-of-the-month program is based on scholarship, participation in FFA and other school activities. A member's supervised farming program is also considered by the chapter committee who reviews all prospective winners. Chapter approval of the committee's selection makes the award final. Primary objectives of this program are to promote leadership within the chapter and to improve the public image of the FFA chapter in the school and community.

The Safe Driver of the Month is picked by a chapter committee in cooperation with the local chief of police and a state highway patrolman. The winner is selected on the basis of observation by the chapter members of individuals who have displayed sensible and correct observance of traffic regulations in their community.

Primary objectives of this program are to promote good highway safety, respect of authority, and awareness of law enforcement.

State officers visited at Cessna Aircraft after being flown there by Kansas Flying Farmers. The Flying Farmers provided air travel on the goodwill tour.

KANSAS—State FFA officers really made a flying trip on their 1967 goodwill tour. Flight transportation was provided for their trip by the Kansas Flying Farmers under the direction of Bill Nickerson of Bushton. The flying trip made it possible for the six state officers to visit and say thank you to donors and sponsors of the Kansas Association's activities. The officers stopped at 15 agencies in five Kansas cities on a three-day schedule that took them over most of their state.

They started their tour in Topeka, went on to Kansas City, Wichita, Arkansas City, and Hutchinson. Some stops the officers made were at the Kansas Cooperative Council, Santa Fe Railroad Company, Farmlands Industries, Cessna Aircraft Company, Federal Land Bank, Livestock Market Foundation, and several radio and television stations. They all called on Governor Docking and visited the state senate.

"AGRICULTURE USA" is an exciting program on many television stations throughout the United States. It often features Future Farmers as guests of the program's host, Mr. John Stearns.

One popular feature of the program is the AgriQuiz. It is a game of fast recall in which students compete in their knowledge of agribusiness subjects. A recent show featured state FFA officers from California and Nevada as teams in the AgriQuiz.

Oftentimes, the Future Farmers are invited to question a noted authority in agribusiness. The students act somewhat like the reporters on "Meet the Press."

The main objective of the show is to sell the idea that America's largest industry touches the lives of every one of us, therefore, it is important for everyone to learn about it, to respect it, and to protect it!

TEXAS—Denton FFA Chapter is one of 65 Texas chapters who offered cooperative part-time training in agriculture to their students. Chapter advisor at Denton is Mr. Hal Rylander.

Pilot programs in cooperative training programs were conducted in nine Texas schools in the 1965-66 school year to determine the effectiveness of this type of training in agriculture.

The program was found to be very successful and was expanded to its present size. Nearly 150 schools are anticipated to participate in the training program next year.

Two typical trainees are Ronnie Hooten and Cluren Wallace. Ronnie works at a nearby Polled Hereford ranch. Cluren works with a local veterinarian.

Cluren Wallace helps diagnose a dog as part of his duties for a veterinarian. Below, Ronnie Hooten is at work on the Bar N Bar Polled Hereford Ranch.

TEN BEST BOOKS FOR YOU

THE AMERICAN Library Association regularly selects 20 best books for young adults. From their list, the editors have chosen ten which should be of most interest to you. If you would like the complete list of 20 books, you can obtain a free copy by writing American Library Association, Young Adult Services Division, 50 East Huron, Chicago, Illinois 60611.

Little World Apart by S. Omar Barker. Two brothers find excitement and adventure in growing up on a small cattle ranch in New Mexico. Doubleday, $4.50.

Fantastic Voyage by Isaac Asimov. How a miniaturized submarine carrying a team of doctors travels through the blood stream of a brilliant scientist in order to save his life. Houghton-Mifflin, $3.95.

Paper Lion by George Plimpton. A writer-by-trade played the part of a rookie quarterback with the Detroit Lions in order to write this entertaining inside view of pro football. Harper, $5.95.

Two in the Bush by Gerald Durrell. A noted animal collector humorously relates his travels through New Zealand, Australia, and Malaya to observe and photograph flying lizards, lyre birds, and other species next-door-to-extinction. Viking, $4.95.

Incident at Exeter by John Fuller. A journalist's investigation of unexplained UFO (unidentified flying objects) phenomena. Putnam, $5.95.

Tinkerbelle by Robert Manry. A copy editor of the Cleveland *Plain Dealer* realized a lifelong goal when he sailed his 13½-foot sloop across the Atlantic alone. Harper, $5.95.

The Barrios of Manta by Earle and Rhoda Brooks. A young sales engineer and his school-teacher wife describe with warmth and enthusiasm their Peace Corps activities among the poverty-stricken people of Manta, Ecuador. New American Library, $5.95.

Biplane by Richard Bach. Trading in his modern plane for a 1929 open cockpit biplane, the writer made a hazardous cross-country flight from North Carolina to California. Harper, $3.95.

Philadelphia, Here I Come! by Brian Friel. Gar's last night at home as dramatized in this contemporary play exposes the lack of communication between generations. Farrar, $4.50.

My Way Was North by Frank Dufresne. As a field agent for the U.S. Biological Survey, Dufresne spent 20 years in Alaska enjoying the frozen wastes, unusual animals, and individualistic people. Holt, $5.95.

Junior Spokesmen for Corn Refining

"CORN IS MORE than feed to produce red meat," states Charles Bruns. He and Burr Young have been selected as two of the 1967 Junior Spokesmen for Corn Refining. Both of these Illinois Future Farmers hail from the heartland of the American corn wet milling industry.

Charles is president of the New Lenox FFA Chapter and has been a consistent winner in the FFA public speaking contests. He is also chairman of his chapter's parliamentary procedure team. Chuck raises crops and livestock in his supervised farming program.

Burr is a member of the Farmington FFA Chapter and lives on a small farm near Trivoli. Burr's principal recommended him as a student who is interested, alert, and capable of bringing home information which he could convey to others.

The Junior Spokesmen won trips to Washington, D.C., and were given tours of corn refining plants in the Midwest.

Here the spokesmen chat with Senator Charles Percy of Illinois on their visit to Capitol Hill.

While in Washington, the Future Farmers were not typical tourists. In addition to seeing all of the sights, they visited with their congressmen and were given VIP tours of the Capitol and other national shrines.

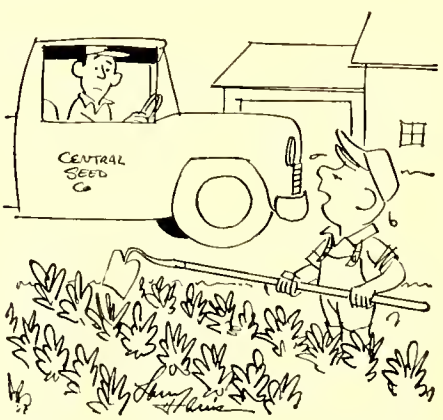
CRAPPIES

(Continued from Page 46)

from the leader. Snelled hooks are tied on these extensions which hold the minnows away from the main line to prevent twisting. The two arms are set about 15 inches apart so you can fish two levels of water.

Think small when fishing for crappies. Two common mistakes made by most fishermen are using a hook and a bait that are too large. A No. 3 fine-wire hook is about right. The minnow should be no more than two inches in length. (A crappie has a small mouth.) The bait either can be hooked in the back, just under the dorsal fin, or through both lips. Either method keeps it alive indefinitely. It is important to have lively bait.

Sometimes the bite of a crappie is very delicate. One can actually come up from below, raise the minnow, and neatly carve it off the hook without the angler realizing he's had a bite. Watch your line closely. Should it start moving off at a tangent, even slightly, raise your rod tip sharply. Probably a crappie is swimming away with your bait with no noticeable pull on the line.



"If he wasn't home, do you think I'd be hoeing the garden?"

It is best to use a net when landing a crappie. This fish has a paper-thin mouth, and the hook easily tears free. When putting one on a stringer, always string it through both lips. A wire-mesh fish basket is even better. Crappies often twist off a stringer.

As for eating, with an average crappie (a pound or less in size), either scale or skin, remove the fins, head, and tail, and fry whole in a deep skillet brimming with sizzling grease. Fry to a rich golden brown and serve with hush puppies or corn bread and a slice of white sweet onion. If there's better eating, I've yet to taste it.

Is there a motion to accept

The Treasurer's Report?

By Melvin Johnson

MY EARS HAVE a habit of hearing things which are not meant for me. One morning I overheard my name mentioned by a member of the chapter nominating committee for the office of treasurer. I blushed like a red bull calf and felt a knot in my stomach as big as a wheel weight. I had always hoped to be an FFA chapter officer but, now that I had been nominated as treasurer, all I could think of was how badly mixed up I could get my own records.

At the meeting that morning, I was elected. Then I began to wonder if I could do the job. I recalled someone's blunt advice, "Prepare for the worst; expect the best; and take what comes."

Now I have almost completed a full year as chapter treasurer. Soon our chapter will elect new officers, and it will become my duty to instruct the new treasurer. I recall how much help I received from the preceding treasurer so I intend to help my successor get started. But I couldn't help wondering if other newly elected treasurers wouldn't like a list of tips and suggestions to help them take over their new jobs.

Not that my suggestions are any better than anyone else's, but here are some worth considering:

- **Take instruction from your predecessor.** In the FFA Manual is a general list of duties for the treasurer. But to really learn the process of keeping local chapter accounts, you should sit down with the outgoing officer and carefully go over accounting procedures.
- **Become thoroughly acquainted with the FFA Official Treasurer's Book.** The book is well suited for keeping chapter records. Understand how to use the running account pages and the other pages for specific accounts. Our chapter has nine different accounts in our budget so I had to add extra pages.
- **Make entries promptly.** It is important to enter all receipts promptly while they are fresh in your mind. It is good business and good public relations to pay all bills promptly.
- **Cooperate with your school treasurer.** If your school has an activity fund treasurer, give this person your best cooperation. Your school treasurer can help you.
- **Make legible entries.** Use a pen and take your time. Remember that a number that looks like a "5" today must look like a "5" to you next month.
- **Help the budget committee.** Your understanding of the chapter budget should be as good as that of the chairman of your earnings and savings committee. You will save yourself a lot of trouble if you ask for written receipts and know what expenses to expect.
- **Give accurate and complete treasurer's reports.** A carefully prepared report, well presented at chapter meetings, will keep members informed as to their financial condition. It also keeps members informed as to what the chapter is doing. To get up at each meeting and report is good speaking experience. Hold your head up and your book high enough to permit you to project your voice; speak clearly and loud enough to be heard by all.

Serving as an FFA treasurer has been one of the most rewarding experiences in my high school career. I have made plans to farm with my father upon graduation from high school. I intend to join other worthwhile organizations in the future. My experience as an FFA officer has prepared me for active membership in any organization I may join.

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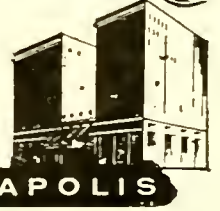


MINNEAPOLIS

Al Kaline has 15 years with the Tigers.

SPORTRAIT

By Stan Allen

SOME BASEBALL experts once thought Al Kaline was too small to play pro baseball, but Al is beginning his fifteenth season with the Detroit Tigers. Only 32 years old, Kaline has developed into an outstanding player both at bat and on defense.

Al received his early lessons on the sandlots of his home town, Baltimore, Maryland. He was a star on Baltimore's Southern High School team playing many positions but mainly as an outfielder. He batted .488 his senior year to finish high school with a fine four-year batting average of .427. During this time, Kaline also played for several other teams and often played three games a day, each for a different team. Al was also a good basketball player who averaged 22.5 points per game on a state championship team. He was offered basketball scholarships but decided on baseball as a career.

Many big league scouts tried to sign Kaline but dropped out when the bidding got high, because they thought he was too light to make it as a pro. The Detroit Tigers finally signed Al for a bonus of around $35,000. He reported to the Tigers in 1953, an 18-year-old 155-pounder. Under the bonus rule in those days, Kaline had to stay with the parent team for two years, but he still managed to appear in 30 games that year. He had seven hits in 28 attempts for a .250 batting average and one home run. Al got a break in 1954 when veteran outfielder Steve Souchock got hurt. Kaline was sent in as a replacement, and they haven't gotten him out of there yet. He turned in an outstanding sophomore season with 139 hits in 504 times at bat for a .276 average. He hit 4 homers, 18 doubles, 3 triples, and drove in 43 runs.

Kaline wrote some baseball history in 1955 when he became the youngest player to win a batting crown. Just 20 years old, he had 200 hits in 504 attempts for a .340 batting average. He clouted 27 homers, 24 doubles, 8 triples, and had 102 RBI's. In a game at Cleveland, he hit three homers in one game, two in one inning. This performance earned him a place on the '55 American League All-Star Team. Al's average dropped to .314 in 1956 although he did have 194 hits, and his 128 RBI's were second to Mickey Mantle's league-leading 130.

The injury bug caught up with Al in 1957 when he played in only 149 games, and his average dropped to .295 with 23 homers and 90 RBI's. He brought his average up to .313 in 1958 and was runner-up to teammate Harvey Kuenn for '59 league honors with a .327 average. He led the American League in slugging that year with a .530 percentage. Al would like to forget the '60 season when his average dropped to its lowest point at .278, but he bounced right back in 1961 to lead the Tigers to 101 wins and second place. Kaline hit .324 with 19 homers, and his 41 doubles led the league. He was back in form in the outfield too. He was running well again, and his throwing arm kept base runners honest. He had ten assists on put-outs that year.

It looked as if 1962 would be Al's big season when he got off to a great start. He was leading the league in hitting with a .345 average, in homers with ten, and in RBI's going into a game with the New York Yankees on May 26. In the last of the ninth inning, the Tigers were ahead with New York at bat and men on base when Elston Howard had a sure hit with a sinking short fly ball. Kaline came charging in and made a spectacular diving catch to save the game, but he broke his collarbone and missed the next 57 games. He still managed to hit .304, raised his homer output to 29, and drove in 94 runs. Injuries have hobbled him the last three years, although he hit at a .312 clip in 1963 with 27 homers and 101 RBI's. His homer output was back up to 29 again last year although he hit only .288. He became one of the few players to join the 2,000 hits club last June.

Kaline has played in 1,862 games for the Tigers, going into the '67 season with 2,087 hits in 6,857 times at bat, and is one of the few players to have a lifetime batting mark over .300. He has a .304. Al has hit 279 home runs, drove in 1,117 runs, and has been selected for the All-Star game 13 times, 12 years in a row. His fielding has won him nine of a possible ten Gold Glove fielding trophies.

Al Kaline's *big* year could be 1967, because he has gotten off to another great start. By May 1, he had been to bat 50 times for 21 hits and a league-leading .420 average with five homers and 11 RBI's. He may also realize his big ambition of playing on a pennant winner as Detroit was leading the league on that date.

"But I didn't know the roof was rotten."

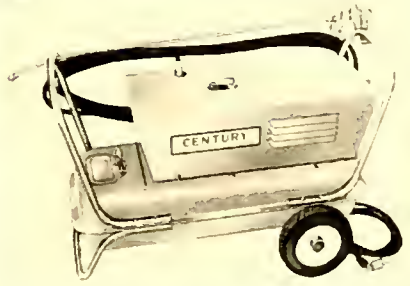
F. Here is a new flail pickup attachment you can put on your baler. It lets you cut, chop, and bale corn stover in one operation. The attachment makes it possible for you to use the stover for livestock feed or bedding instead of letting it go to waste. (New Holland)

something new

G. This tractor-drawn tiller will break up ten-foot-wide strips with a new vibrating action. It is made to fit any type of soil condition. (Armco Steel Corporation)

H. Here's an easily maneuvered machine that will make fast work of clearing stumps from your land. It features a simple, efficient, and fast operation. (Wayne Mfg.)

I. A new line of tack racks and saddle racks has been introduced on the market. They are designed to protect bridles and gear from rusting metal. (Fabco Company)



J. Blast dirt and grime off equipment and reduce wear, rust, and costly breakdowns. A machine that will find many uses on top farms today. (Century Engineering Corp.)

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HAVE YOU HEARD THE ONE ABOUT

Joe: *"How do you keep a cow from having a calf?"*
Tom: *"I don't know."*
Joe: *"Feed it Applejacks to keep the bullies away."*

Jody Mesch
New Providence, Iowa

"Which Don? The one with the '57 Chevy, or the one with the '66 Ford?"

When the weather gets warmer, a young man's fancy turns to the great national pastime. Some think about baseball, too.

James Doyle
Lakin, Kansas

Brother: *"I thought I asked you not to tell Mother what time I got home last night."*
Sister: *"I didn't. I just said I was too busy getting breakfast to take a look at the clock."*

Freddie Parrish
Roundhill, Kentucky

Officer talking to motorist: *"How many wrecks did you have?"*
Motorist: *"Oh, about 25."*
Officer: *"Twenty-five! And you still have your driver's license?"*
Motorist: *"Yes."*
Officer: *"What kind of wrecks did you have?"*
Motorist: *"Ones just like I'm driving now."*

Mervin Weaver
Middletown, Pennsylvania

Talkative barber: *"Your hair seems to be turning gray."*
Impatient customer: *"I'm not surprised. Can't you work a little faster?"*

Ronnie Daniel
Naples, Texas

John: *"What is the difference between a girl and a soldier?"*
Teddy: *"I don't know."*
John: *"One faces the powder, and the other powders the face."*

Rosemary Chrisman
Bangs, Texas

Teacher: *"How are a paragraph and a skirt alike?"*
Student: *"I don't know. How?*
Teacher: *"Short, but long enough to cover the subject."*

Mike Suter
Jerome, Idaho

Guard: *"Halt. You can't go in there."*
Private: *"Why not?"*
Guard: *"Because it's the general's quarters."*
Private: *"Then what's it doing with that sign 'private' on the door?"*

Gerald Krause
Berlin, Wisconsin

"*So,*" crooned the romantic girl to her boy friend, *"you love me with all your heart. Would you die for me?"*
"*No,*" said he, *"mine is an undying love."*

James DePauw
Malcom, Iowa

Father: *"Why is your January report card so bad?"*
Son: *"Well, you know things are always marked down after Christmas!"*

James Smith
Gordo, Alabama

Recovering from an operation, a patient asked his doctor why all the blinds were drawn.

The doctor replied, *"Well, you see there's a fire across the street, and I didn't want you to wake up thinking the operation had been a failure."*

Gary Coffey
Ashmore, Illinois

Every year the farmer complained about the weather and the crops. It was too wet or too dry, too much grass or too many weevils, or there was no market.

Then a year came when good crops were harvested. Prices went soaring, and bank accounts were bulging. *"Pretty good year you'll have to admit,"* a neighbor said.

"Middling," the farmer allowed. *"but terribly hard on the soil."*

Johnny Sherrer
Bay City, Texas

It isn't that kids don't like school. It's the principle of the thing.

Dee Reneau
Hagerstown, Indiana

Charlie, the Greenhand

"Did I remember to feed what?"

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